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SURFACE PRESSURE MEASUREMENTS ON A HIGHLY SHEPT DELTA
MINDED WIND TUNNEL.. (U) NAVAL SURFACE WEAPONS CENTER
SILVER SPRING MD A S COLLIER ET AL. AUG 86

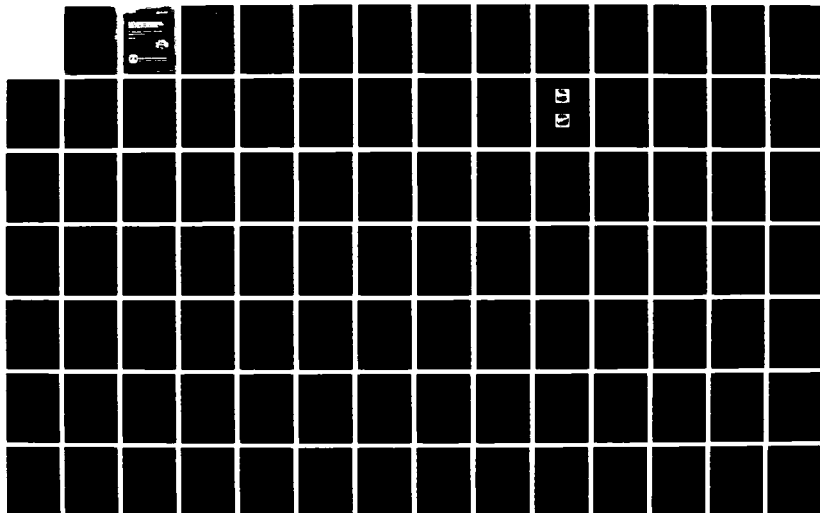
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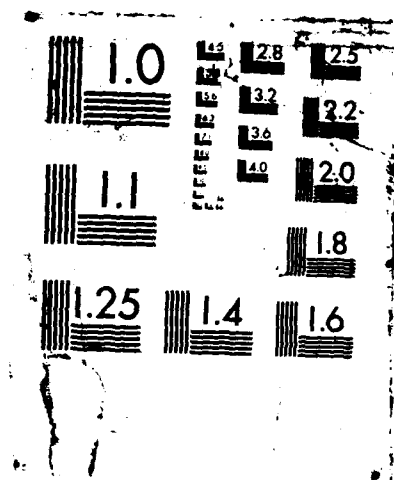
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FOREWORD

The surface pressures of a highly swept delta winged model were measured at Mach numbers of 2, 3, and 4 in the Naval Surface Weapons Center Supersonic Tunnel No. 2 (NSWC T-2) using a commercial pressure measurement system. The tests were performed in May 1985.

Surface pressure measurements are reported for 75 percent of the body length and the entire span of the wing for 0, 5, 10, and 15 degrees angle of attack and all roll angles from 0 to 360 degrees in 22.5-degree increments.

This work was sponsored by Mr. D. Hutchins of the Naval Air Systems Command (NAVAIR, AIR 320K) and Mr. L. Pasiuk of the Naval Sea Systems Command (NAVSEA R41 62). This document describes in detail the model design, the test apparatus, and the experimental techniques used for this test program. The authors wish to acknowledge Mr. G. D. Prats for suggestions on the use of the PSI system, Mr. D. W. Ausherman for feedback on past test programs, and Messrs. S. Cothran, Jr., and R. J. Marshall for their assistance in conducting the tests.

Approved by:

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C. A. FISHER, Head
Weapon Dynamics Division

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INTRODUCTION

In light of new missile system requirements, numerical methods for predicting aerodynamic performance have assumed an increased importance. Stringent requirements on missile radar cross section and range mandate the development of the capability to accurately predict the aerodynamics of unconventionally shaped missiles with blended inlets. Traditional methods for predicting these aerodynamic characteristics are semi-empirical in nature and rely on an extensive data base for similar classes of missile shapes. Hence these predictive methods are often not applicable to new geometries of interest. Also, there is likely to be an increase in the use of ramjet propulsion which requires the ability to predict the inlet flow field. Such quantities cannot be determined by simple, semi-empirical prediction methods.

Numerical methods for calculating the aerodynamics of missiles are currently being developed. However, such methods need detailed experimental data for validation. Existing data generally is restricted to forces and moments with limited examples of surface pressure measurements¹. The typical missile configurations. The data generated by these

tests will be used to increase the level of understanding of the aerodynamic behavior of high lift-to-drag (L/D) vehicles at angles of attack in supersonic flows. In particular, it will be utilized to validate computational codes which are being developed to predict the flow field characteristics of such vehicles.

TEST FACILITY

The NSWC Supersonic Tunnel #2 (T-2) is a 16 x 16 inch cross section horizontal tunnel with an open jet test section and a model support system that has pitch, yaw and roll capability. The tunnel working medium is high pressure air which can be heated, via a steam heater, to temperatures from 175 to 225 degrees Fahrenheit . The tunnel is equipped with schlieren quality glass ports that permit a 16 x 24 inch viewing area. T-2 is capable of operating over a Mach number range from Mach 0.3 to Mach 5 with a supply pressure ranging from 0.5 to 15 atmospheres. This Mach range is provided by interchanging two-dimensional nozzles.

T-2 is capable of either blow-down or recirculating operation. For this test series, the tunnel was operated in a recirculating mode at Mach numbers of 2.02, 3.02 and 4.00 with nominal Reynolds numbers of $3.7 \times 10^6/\text{ft}$, $2.3 \times 10^6/\text{ft}$ and $1.5 \times 10^6/\text{ft}$, respectively ($p_o=1 \text{ atm}$).

MODEL DESCRIPTION

The basic model used for this test program consisted of a three caliber tangent ogive nose affixed to a two inch o.d., seven caliber cylindrical afterbody. It was designed as a split slotted body which could be used with any one of five wing configurations, shown in Figure 1. Also, a wing support allows for wing-alone testing.

The specific configuration tested is shown in Figure 2. The long delta wing is beveled so that a thin wing can be assumed in future calculations. The wing is positioned so that the leading edge starts at the aft part of the nose (six inches from the model nosetip). The total model wing span is six inches and the cross sectional thickness is 0.250 inches. The leading edge sweep angle is 77.5 degrees, the wing bevel angle is 75 degrees (as shown) and the root chord length is 9.02 inches. This wing contains 60 pressure taps, 58 of which are located on one half of the flat surface (see Figure 3). The body contains 91 pressure taps, 89 of which are clustered into one quarter of the body surface area. The two remaining taps in both the wing and the body yield flow symmetry data.

INSTRUMENTATION

Pressure measurements were made using a commercial system from Pressure Systems Incorporated (PSI). The PSI system consists of ten modules, each containing 16 pressure transducers. Each module is scanned electronically to acquire

its sixteen transducer output signals. The analog output signals are then transferred to the data acquisition and control unit (DACU), digitized and the results stored in the DACU RAM to be dumped to magnetic tape and reduced at a later time. Each pressure transducer was calibrated using a Stokes McLeod pressure gauge and a Barocel 1000 mm differential transducer. The accuracy of each PSI transducer was found to be within the specified accuracy; 0.25% of its full range (0.013 psi for 5 psi modules, 0.025 psi for 10 psi modules).

Tunnel conditions and model positions were recorded with a PSI random access mini millivolt (RAMM) analog-to-digital (A/D) converter. This A/D converter had an accuracy of 1.25 millivolts for a full-scale range of 500 millivolts.

TEST PROCEDURES

In preparation for a day of testing, the PSI system was brought on - line and an automatic pressure calibration sequence was initiated. The primary purpose of performing this simple three point calibration was to make available the ability to monitor the output of any one pressure transducer without collecting data. The transducers were then put through an eight point calibration to insure that the low pressure response characteristics of each transducer were defined. The calibration pressures ranged from 1 - 80 torr.

The RAMM-30 signals were also calibrated on a daily basis. A four point angle of attack calibration was made with alpha varying between 0 and 15 degrees. The roll angle calibration was made with five points from 0 to 360 degrees. The supply pressure was calibrated between 0 and 15 psi and the supply temperature was calibrated between 32 and 200 degrees Fahrenheit.

The model was positioned at 0 degree angle of attack before the tunnel was started. After the desired tunnel supply conditions were reached, data acquisition began. The model was first rolled to a position and then pitched through its series of angle of attack. A nominal 60 second delay for pressure equilibration was used between pitching and data acquisition for Mach 2 and 3. A 120 second delay was used at Mach 4. The model was always returned to 0 degree angle of attack prior to rolling to the next position. A list of run positions is given in Table 1.

DATA REDUCTION

The surface pressure measurements, the angle of attack, the roll angle, and the supply pressures and temperatures reported are averaged values of 50 data samples. The data rate at which these samples were collected is about 50 Hz. Each set of data was obtained in raw data counts and reduced using the calibration coefficients of the day. It was found that the transducer characteristics were best described by two straight lines, one for the lower pressures (1.1 - 5.0 torr) and one for the higher pressures (10.0 - 80.0 torr). In

the reduction of this pressure data, the point at which the two curves intersect was used as the criteria for determining which calibration curve would be used. The other data was reduced using standard reduction schemes.

RESULTS

Surface pressure data is presented in the appendix for each model run position (see Tables 2-9 for sample output). Each data set has been separated into two parts; body surface pressures and wing surface pressures. In the output, the pressure measured by each body pressure tap is given as $p(z/d, \theta)$, where z/d is the axial distance from the nosetip to the pressure tap and θ is the angular ray on which the pressure tap is located (see Figure 2). The pressure measured by each wing tap is given as $p(z/d, r/d)$ where z/d is the dimensionless axial distance from the nosetip to the pressure tap and r/d is the dimensionless distance from the model centerline to the pressure tap.

The model has four sets of symmetric pressure taps, two sets on the body and two on the wing. The values of each symmetric set are presented as two pressures separated by a comma (,). One should also note that the first, second and fourth axial positions of the wing matrix contain r/d coordinates which are not common to the remaining matrix. These tap locations are denoted with an asterisk(*), a plus

sign (+) and an exclamation point(!). The actual coordinates of these points are;

$$* \Rightarrow r/d = 0.5465$$

$$+ \Rightarrow r/d = 0.5745$$

$$! \Rightarrow r/d = 0.6850$$

In order to qualitatively illustrate the surface pressure data of the highly swept delta winged model, a commercial contour plotting routine based on a linear interpolation scheme was used. Sample results are given in Figures 4 - 7.

Schlieren photographs of selected runs are presented in Figures 8 and 9.

CONCLUSIONS

The surface pressures of a highly swept delta winged model were measured at Mach 2, 3 and 4 in the Naval Surface Weapons Center Supersonic Tunnel No. 2 (NSWC T-2) for a variety of model positions using a commercial pressure measurement system. The results of the test are listed in the appendix of this report.

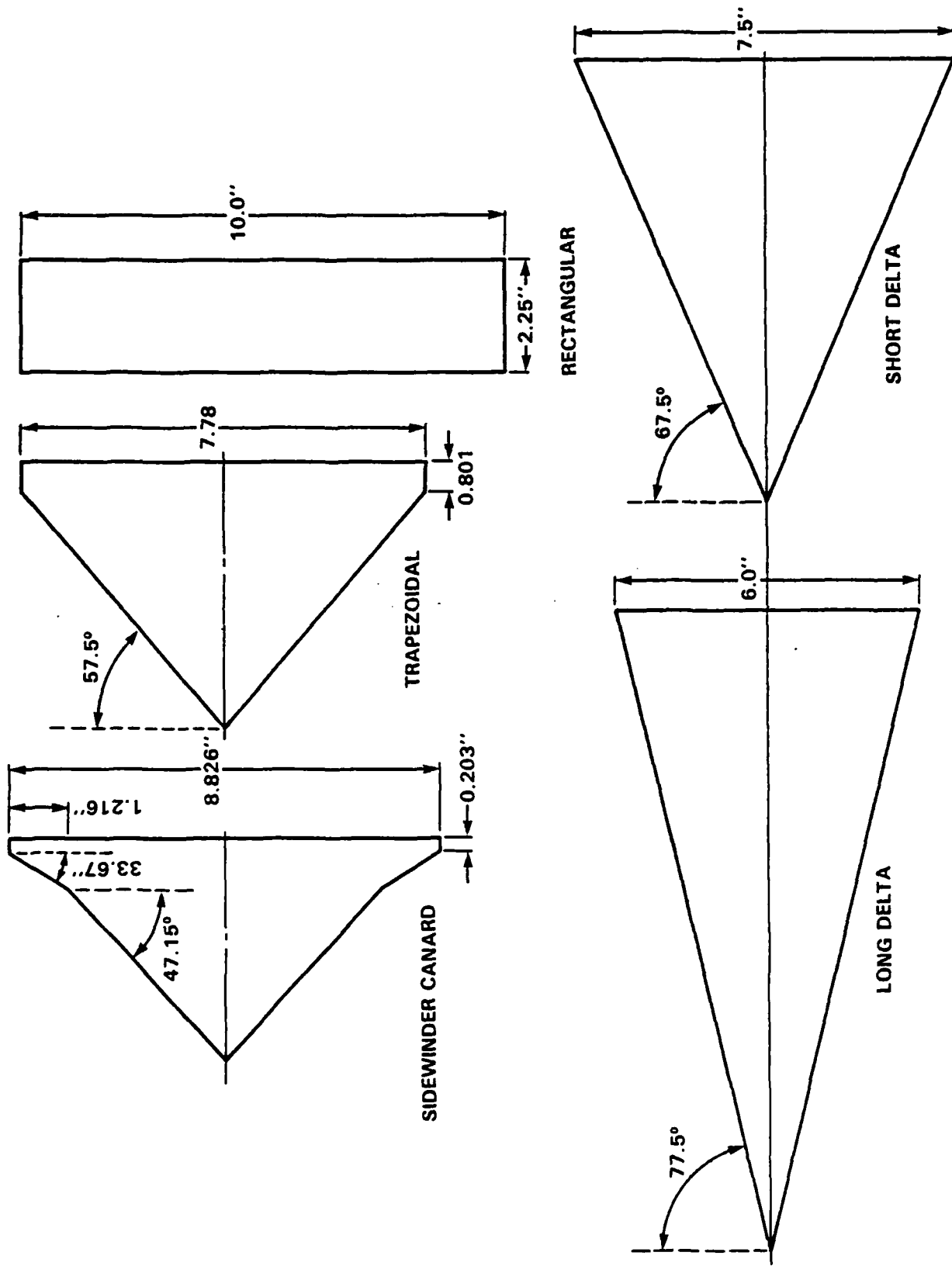


FIGURE 1. DIAGRAM OF WING CONFIGURATIONS

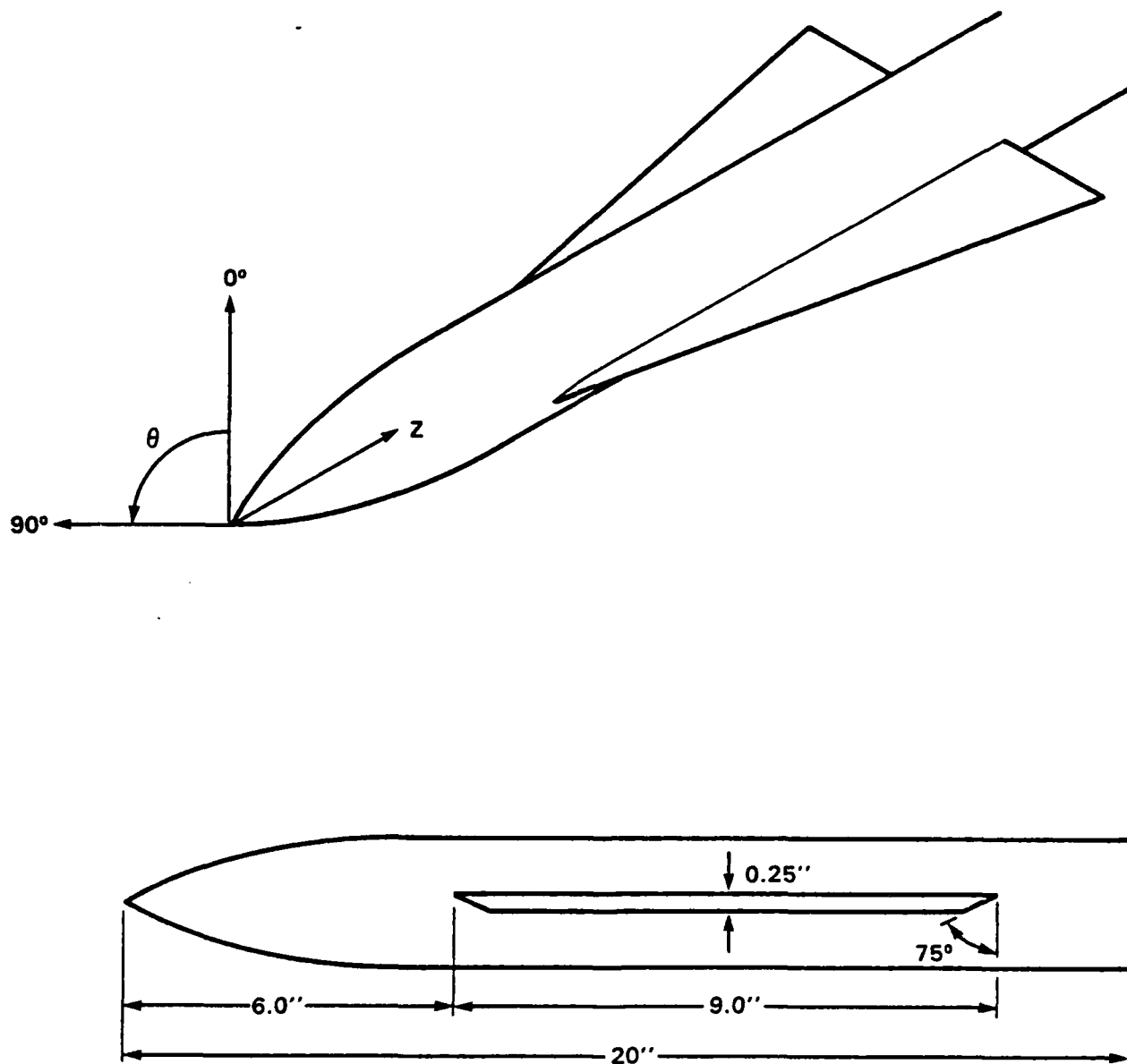


FIGURE 2. DIAGRAM OF HIGHLY SWEEPED DELTA WINGED MODEL

BODY-WING PRESSURE TAP LOCATIONS

60 WING PRESSURE TAPS
91 BODY PRESSURE TAPS

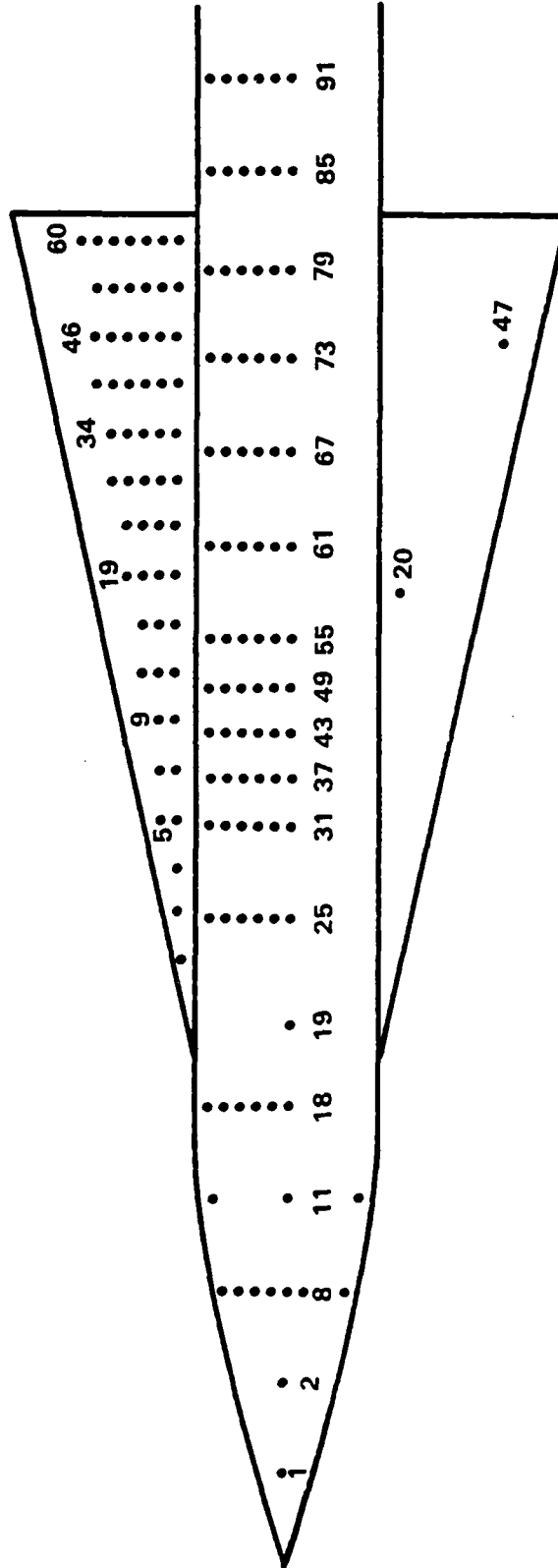


FIGURE 3. LOCATION OF PRESSURE TAPS

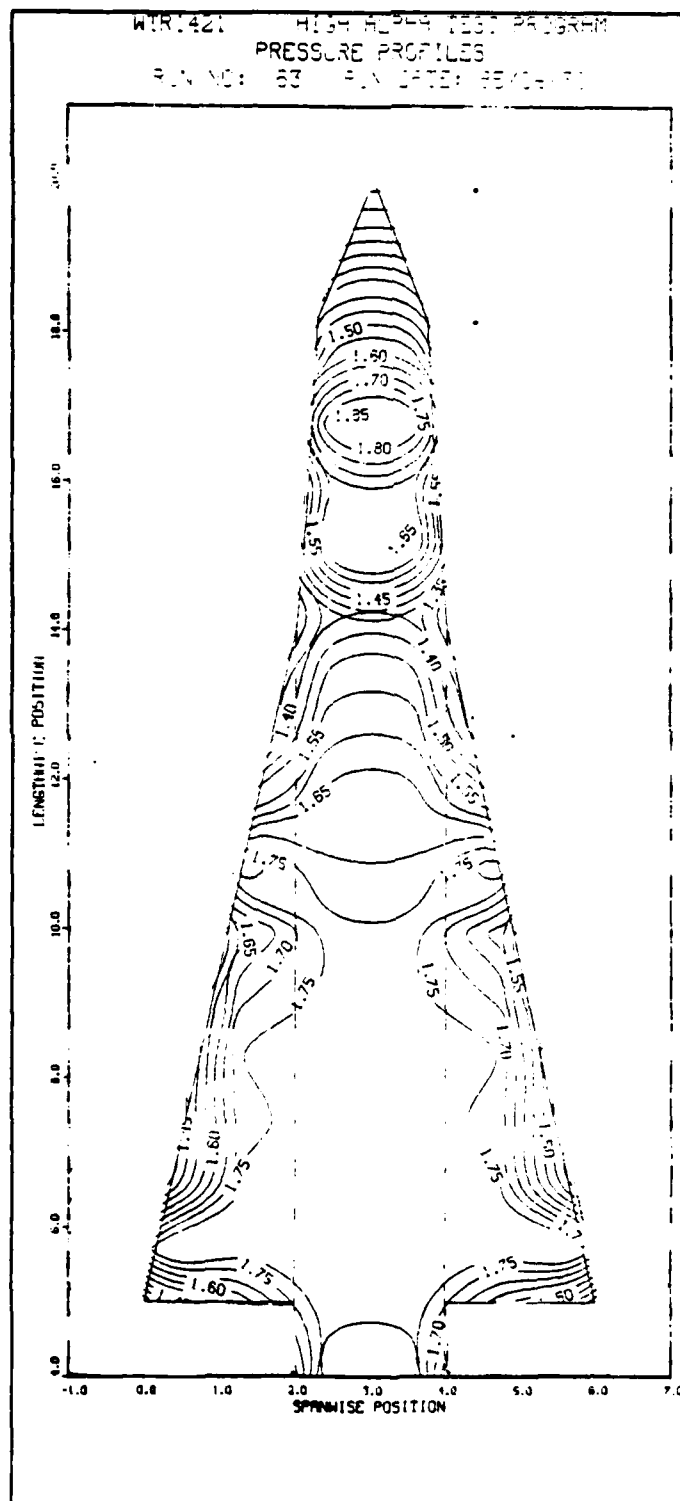


FIGURE 4. SURFACE PRESSURE CONTOUR OF MODEL; $M = 2.0$, $\phi = 90^\circ$, $\alpha = 0^\circ$

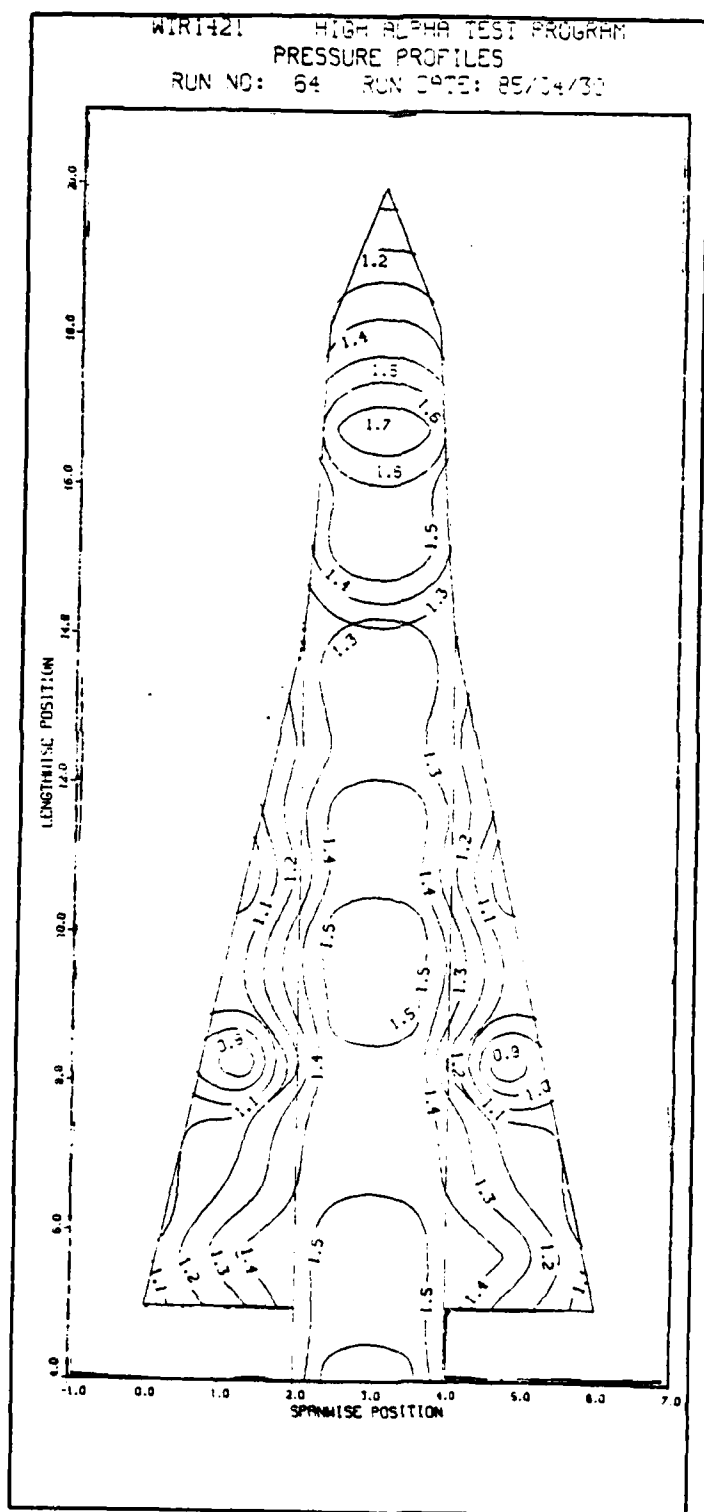


FIGURE 5. SURFACE PRESSURE CONTOUR OF MODEL; $M = 2.0$, $\phi = 90^\circ$, $\alpha = 5^\circ$

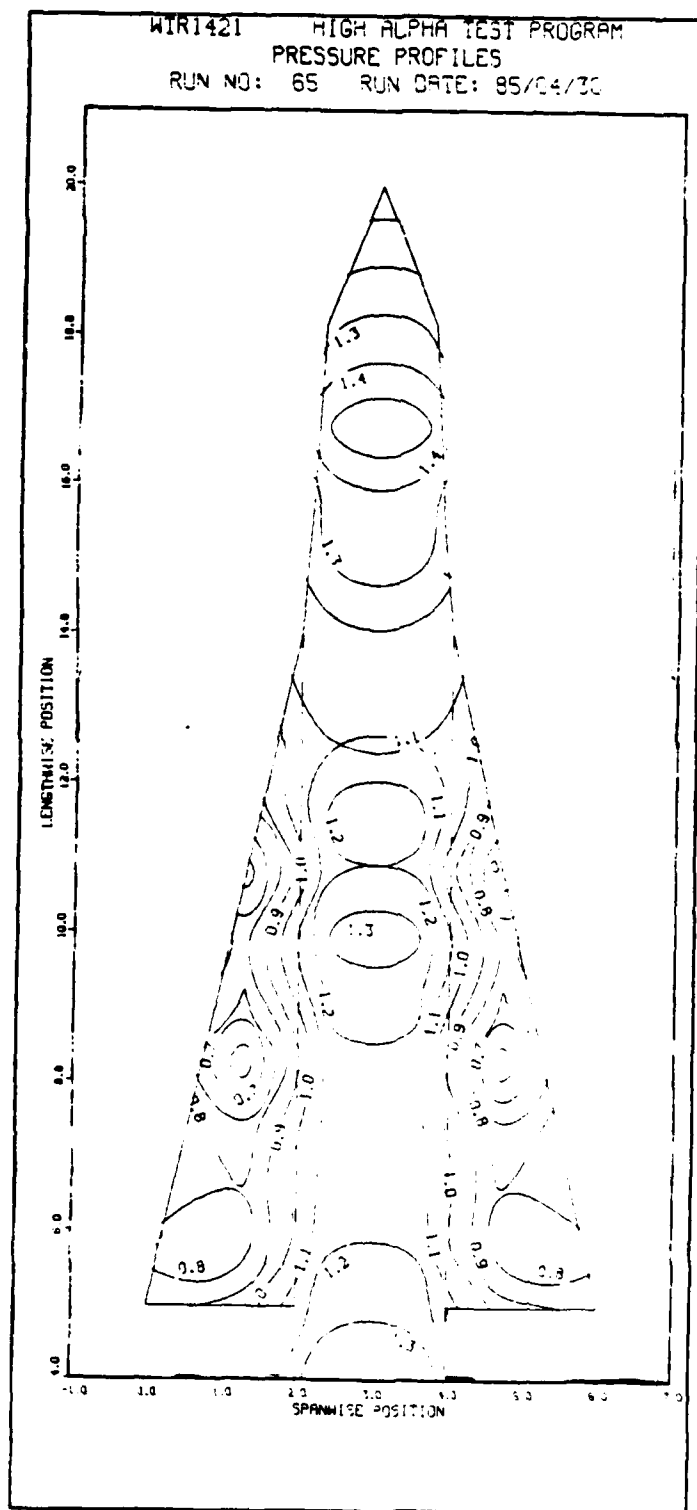


FIGURE 6. SURFACE PRESSURE CONTOUR OF MODEL; $M = 2.0$, $\phi = 90^\circ$, $\alpha = 10^\circ$

WTR1421 HIGH ALPHA TEST PROGRAM
PRESSURE PROFILES
RUN NO: 66 RUN DATE: 85/04/30

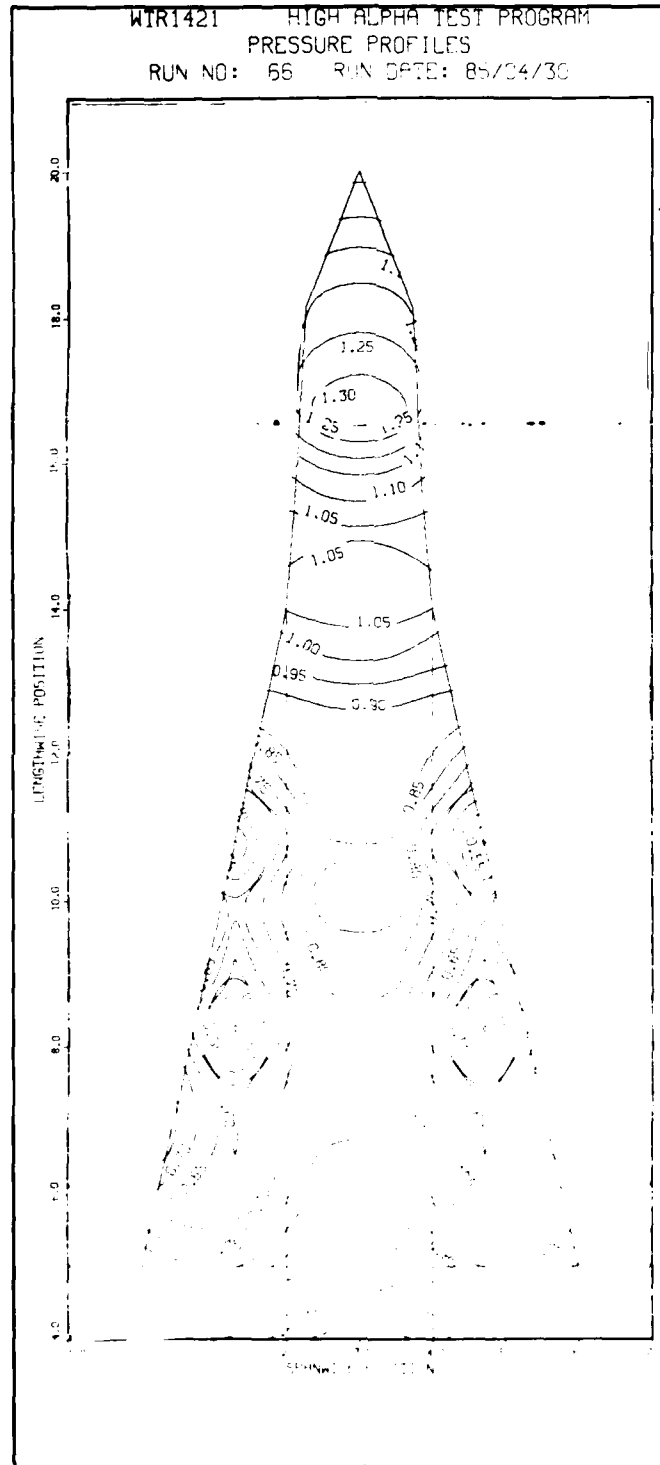


FIGURE 7. SURFACE PRESSURE CONTOUR OF MODEL; $M = 2.0$, $\phi \mp 90^\circ$, $\alpha = 15^\circ$

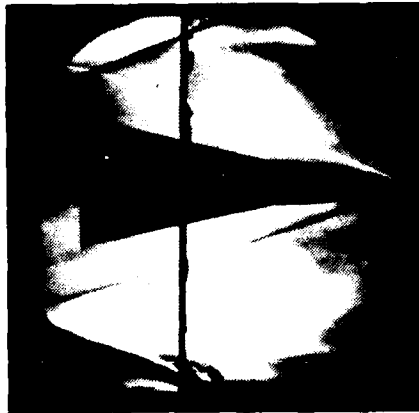


FIGURE 8. SCHLIEREN PHOTOGRAPH; $M = 3.0$, $\alpha = 0^\circ$, $\phi = 0^\circ$

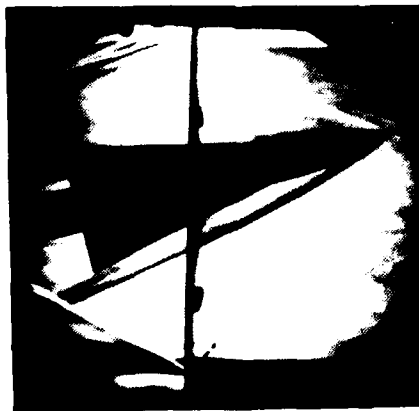




















FIGURE 9. SCHLIEREN PHOTOGRAPH; $M = 3.0$, $\alpha = 15^\circ$, $\phi = 0^\circ$

TABLE 1. MODEL RUN POSITIONS

MODEL ROLL ANGLE, Φ	WING ORIENTATION (LOOKING DOWNSTREAM)
0	
22.5	
45.0	
67.5	
90.0	
112.5	
135.0	
157.5	
180.0	
202.5	
225.0	
247.5	
270.0	
292.5	
315.0	
337.5	
360.0	

 DENOTES THE QUADRANT
IN WHICH THE PRESSURE TAPS
ARE LOCATED

WHITE OAK LABORATORY

TABLE 2. DATA; $M = 3.0$, $\phi = 90^\circ$, $\alpha = 0^\circ$

WIR1421 RUN 40		TUNNEL T2 PRESSURE TEST							WIR1421 RUN 40	
		PSI CONFIGURATION			PSI#1(PR/10)		PSI#2(TC/1)			
ALPH	0.04 deg	PHI	88.55 deg AVERAGED DATA	P0	14.63 psia SCALE FACTOR:	T0	107.12 degF	MACH	3.0	
BODY PRESSURES (PSI)										
	z/d	theta:	103.6	118.6	133.6	148.6	163.6			
	0.5	0.8940								
	1.0	0.7065								
	1.5	0.5597	0.5715	0.5756	0.5750	0.5738	0.5675, 0.5857			
	2.0	0.4495					0.4459, 0.4428			
	2.5	0.4020	0.3966	0.3889	0.3870	0.3841	0.3888			
	3.0	0.3243								
	3.5	0.3301	0.3292	0.3334	0.3317	0.3377	0.3374			
	4.0	0.3422	0.3402	0.3398	0.3410	0.3420	0.3446			
	4.3	0.3443	0.3439	0.3447	0.3422	0.3471	0.3428			
	4.5	0.3511	0.3462	0.3517	0.3484	0.3490	0.3497			
	4.8	0.3563	0.3533	0.3608	0.3573	0.3610	0.3521			
	5.0	0.3621	0.3639	0.3635	0.3734	0.3563	0.3690			
	5.5	0.3697	0.3699	0.3703	0.3697	0.3678	0.3734			
	6.0	0.3746	0.3745	0.3739	0.3742	0.3725	0.3735			
	6.5	0.3790	0.3772	0.3790	0.3812	0.3839	0.3826			
	7.0	0.3821	0.3832	0.3792	0.3772	0.3760	0.3824			
	7.5	0.3826	0.3835	0.3859	0.3768	0.3827	0.3790			
	8.0	0.3964	0.4314	0.4013	0.4352	0.3630	0.3431			
WING PRESSURES (PSI)										
	z/d	r/d:	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435		
	3.625	0.3681*								
	3.875	0.3497*								
	4.125	0.3407								
	4.375	0.3340	0.3577							
	4.625	0.3720	0.3606							
	4.875	0.3399	0.3640							
	5.125	0.3812	0.4016	0.3469						
	5.375	0.3634	0.3683	0.3646						
	5.625	0.3683	0.3730	0.3702	0.3191					
	5.875	0.3675	0.3736	0.3724						
	6.125		0.3716	0.3781	0.3856	0.3065				
	6.375	0.3877	0.3837	0.3803	0.3810	0.3271				
	6.625	0.3754	0.3842	0.3832	0.3903	0.3412	0.3134			
	6.875	0.3707	0.3732	0.3895	0.3820	0.3941	0.3135, 0.3200			
	7.125	0.3729	0.3727	0.3726	0.3759	0.3760	0.3086			
	7.375	0.3751	0.3716	0.3760	0.3770	0.3721	0.3554	0.3006		

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TABLE 3. DATA; M=30, $\phi=90^\circ$, $\alpha=5^\circ$

WTR1421 RUN 41	ALPH	4 96 deg	PHI1	TUNNEL T2 PRESSURE TEST			WTR1421 RUN 41
				PSI CONFIGURATION	PSI#1(PR/10)	PSI#2(TC/1)	
		88.62 deg		P0	14.62 psia	T0	107.15 degf
		AVERAGED DATA			SCALE FACTOR:	1.0000	MACH
							3.0
				BODY PRESSURES (PSI)			
		z/d	theta:	103.6	118.6	133.6	148.6
		0.5	88.6				163.6
		1.0	0.6977				
		1.5	0.5533				
		2.0	0.4454	0.4529	0.4610	0.4753	0.4927
		2.5	0.3616	0.3321	0.3227	0.3229	0.3272
		3.0	0.3352				
		3.5	0.2876				
		4.0	0.2978	0.2963	0.2972	0.2878	0.2790
		4.5	0.3099	0.3049	0.2971	0.2877	0.2746
		5.0	0.3143	0.3080	0.2955	0.2858	0.2694
		5.5	0.3203	0.3096	0.2980	0.2811	0.2636
		6.0	0.3304	0.3199	0.2995	0.2808	0.2602
		6.5	0.3400	0.3312	0.3050	0.2870	0.2551
		7.0	0.3514	0.3454	0.3313	0.2999	0.2743
		7.5	0.3471	0.3447	0.3285	0.3092	0.2914
		8.0	0.3386	0.3337	0.3261	0.3233	0.2963
			0.3289	0.3335	0.3252	0.3162	0.3035
			0.3248	0.3252	0.3209	0.3109	0.3076
			0.3356	0.3723	0.3336	0.3690	0.3151
				WING PRESSURES (PSI)			
		z/d	r/d:	0.7185	0.8435	0.9685	1.0935
		3.625	0.5935				1.2185
		3.875	0.1480				1.3435
		4.125	0.1259				
		4.375	0.1148				
		4.625	0.1367	0.1351			
		4.875	0.1375	0.1275			
		5.125	0.2660	0.2885			
		5.375	0.2601	0.1137			
		5.625	0.2684	0.1548			
		5.875	0.2764	0.1161	0.1262		
		6.125	0.2779	0.2120			
		6.375	0.2986	0.2443			
		6.625	0.2926	0.2735	0.1392	0.1211	
		6.875	0.2889	0.2851	0.1297	0.1379	
		7.125	0.2971	0.2797	0.1400	0.1438	0.1352
		7.375	0.3059	0.2878	0.1333	0.1444	0.1381
				0.2933	0.1212	0.1219	0.1257
					0.1216	0.1230	0.1263
							0.1271

WHITE OAK LABORATORY

TABLE 4. DATA; $M = 3.0$, $\phi = 90^\circ$, $\alpha = 10^\circ$

WIR1421 RUN 42	TUNNEL T2 PRESSURE TEST						WTR1421 RUN 42			
ALPH	9.95 deg	PHI	PSI CONFIGURATION			TO 107.22 degF	MACH	3.0		
			88.42 deg AVERAGED DATA	P0	14.62 psia SCALE FACTOR:				PSI#1(PR/10)	PSI#2(TC/1)
BODY PRESSURES (PSI)										
z/d	theta	88.4	103.4	118.4	133.4	148.4	163.4			
0.5		0.5565								
1.0		0.4474								
1.5		0.3654								
2.0		0.3072	0.3690	0.3689	0.3740	0.3954	0.4419,0.4575			
2.5		0.2934	0.2830	0.2667	0.2531	0.2462	0.3352,0.3390			
3.0		0.2586					0.2760			
3.5		0.2834	0.2565	0.2271	0.2126	0.2082	0.1868			
4.0		0.3094	0.2865	0.2036	0.2023	0.1943	0.1683			
4.3		0.3139	0.3099	0.1905	0.2019	0.1899	0.1559			
4.5		0.3175	0.3204	0.1700	0.1905	0.1914	0.1409			
4.8		0.3249	0.3184	0.1688	0.1967	0.1889	0.1230			
5.0		0.3279	0.3230	0.1841	0.2032	0.1794	0.1135			
5.5		0.3199	0.3124	0.2408	0.2318	0.1963	0.1205			
6.0		0.3028	0.2982	0.2421	0.2485	0.2049	0.1236			
6.5		0.2938	0.2867	0.2472	0.2487	0.1942	0.1460			
7.0		0.2910	0.2886	0.2386	0.2317	0.1943	0.1678			
7.5		0.2853	0.2786	0.2402	0.2155	0.1975	0.1961			
8.0		0.2952	0.3333	0.2589	0.2962	0.2601	0.3001			

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.0856							
3.875	0.0625							
4.125	0.0471							
4.375	0.0368	0.0695						
4.625	0.0694	0.0598						
4.875	0.0599	0.1453						
5.125	0.1207	0.0494	0.0685					
5.375	0.1086	0.0506	0.0589					
5.625	0.1218	0.1127	0.0498	0.0574				
5.875	0.1138	0.0489	0.0516					
6.125		0.0574	0.0561	0.0632	0.0552			
6.375	0.1753	0.0905	0.0699	0.0703	0.0808			
6.625	0.1871	0.1116	0.0746	0.0810	0.0772	0.0760		
6.875	0.1801	0.1028	0.0750	0.0733	0.0782	0.0806, 0.0657		
7.125	0.1830	0.1170	0.0679	0.0689	0.0635	0.0684		
7.375	0.1915	0.1336	0.0802	0.0793	0.0715	0.0787	0.0824	

WHITE OAK LABORATORY

TABLE 5. DATA; $M = 3.0$, $\phi = 90^\circ$, $\alpha = 15^\circ$

WIR1421 RUN 43	ALPH	14.94 deg	PIII	88.48 deg AVERAGED DATA	P0	14.64 psia SCALE FACTOR:	PSI#1(PR/10)	PSI#2(TC/1)	TO	107.18 degf	MACH	3.0
TUNNEL T2 PRESSURE TEST												
PSI CONFIGURATION												
1.0000												
BODY PRESSURES (PSI)												
z/d	theta:	88.5	103.5	118.5	133.5	148.5	163.5					
0.5	0.4519											
1.0	0.3677											
1.5	0.3063											
2.0	0.2681											
2.5	0.2754											
3.0	0.2468											
3.5	0.2667											
4.0	0.2486											
4.3	0.2475											
4.5	0.2459											
4.8	0.2561											
5.0	0.2542											
5.5	0.2396											
6.0	0.2287											
6.5	0.2309											
7.0	0.2393											
7.5	0.2450											
8.0	0.2600											
WING PRESSURES (PSI)												
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435				
3.625	0.0702											
3.875	0.0468											
4.125	0.0279											
4.375	0.0136	0.0489										
4.625	0.0450											
4.875	0.0334											
5.125	0.0499											
5.375	0.0443											
5.625	0.0924	0.0563										
5.875	0.0706											
6.125												
6.375	0.0884											
6.625	0.0798											
6.875	0.0740											
7.125	0.0827											
7.375	0.1003											
0.0588												
0.0621, 0.0519												
0.0508												
0.0614												
0.0680												

TABLE 6. DATA; $M = 3.0$, $\phi = 270^\circ$, $\alpha = 0^\circ$

[illegible]

WHITE OAK LABORATORY

FIGURE 7. DATA; $M = 3.0$, $\phi = 270^\circ$, $\alpha = 5^\circ$

WIR1421 RUN 73		TUNNEL T2 PRESSURE TEST				PSI CONFIGURATION		PSI#1(PR/10)		PSI#2(TC/1)		WTR1421 RUN 73	
APII	4.92 deg	PIII	269.66 deg	P0	14.84 psia	T0	110.75 degf	MACH	3.0				
			AVERAGED DATA		SCALE FACTOR:		1.0000						
			BODY PRESSURES (PSI)										
z/d	theta:	269.7	284.7	299.7	314.7	329.7	344.7						
0.5	1.1924												
1.0	0.9516												
1.5	0.7584		0.7712	0.7594	-0.7269	0.6849	0.6273, 0.6078						
2.0	0.6066						0.4895, 0.4559						
2.5	0.5291		0.5239	0.5047	0.4803	0.4475	0.4218						
3.0	0.4207												
3.5	0.4169		0.4145	0.4045	0.3860	0.3909	0.4042						
4.0	0.4207		0.4165	0.4067	0.4084	0.4205	0.4341						
4.3	0.4182		0.4168	0.4154	0.4167	0.4335	0.4359						
4.5	0.4209		0.4171	0.4242	0.4303	0.4359	0.4458						
4.8	0.4258		0.4252	0.4412	0.4430	0.4500	0.4516						
5.0	0.4321		0.4407	0.4472	0.4643	0.4437	0.4771						
5.5	0.4429		0.4492	0.4538	0.4530	0.4574	0.4869						
6.0	0.4534		0.4556	0.4592	0.4596	0.4734	0.4896						
6.5	0.4650		0.4572	0.4569	0.4677	0.4845	0.4947						
7.0	0.4718		0.4710	0.4649	0.4777	0.4813	0.5018						
7.5	0.4768		0.4786	0.5008	0.4881	0.4937	0.4956						
8.0	0.4929		0.5251	0.5099	0.5407	0.4687	0.3755						
WING PRESSURES (PSI)													
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435					
3.625	0.5374*												
3.875	0.5214*												
4.125	0.5249												
4.375	0.5234!	0.5397											
4.625	0.5365												
4.875	0.5431												
5.125	0.5235		0.5460										
5.375	0.4997		0.5418										
5.625	0.4992, 0.5078		0.5290										
5.875	0.4923		0.5306										
6.125			0.5124		0.5320								
6.375	0.5135		0.5103		0.5140								
6.625	0.4953		0.5012		0.5177								
6.875	0.4937		0.5175		0.5393								
7.125	0.4936		0.5223		0.5254								
7.375	0.4965		0.5154		0.5376								
			0.4973		0.5224								
			0.4957		0.5236								
			0.4932		0.4997								
					0.5024								
					0.5090								
					0.5288								
					0.5469								
					0.5392								
					0.5367								
					0.5112								
					0.5057								
					0.5508								
					0.5461, 0.5317								
					0.5256								
					0.5150								
					0.5220								

TABLE 8. DATA: $M = 3.0$, $\phi = 270^\circ$, $\alpha = 10^\circ$

[illegible]

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.6949*							
3.875	0.6812*							
4.125		0.7053						
4.375	0.7034†	0.7172						
4.625		0.7107	0.7223					
4.875		0.7157	0.7046					
5.125		0.6864	0.7019	0.7206				
5.375		0.6595	0.6844	0.7032				
5.625	0.6463	0.6620	0.6785	0.6849	0.7004			
5.875		0.6461	0.6646	0.6830				
6.125			0.6628	0.6834	0.7077	0.6946		
6.375		0.6641	0.6744	0.6810	0.6891	0.7098		
6.625		0.6456	0.6721	0.6806	0.6981	0.7013	0.7107	
6.875		0.6440	0.6512	0.6797	0.6793	0.6970	0.7049, 0.6861	
7.125		0.6419	0.6490	0.6552	0.6693	0.6706	0.6854	
7.375		0.6455	0.6439	0.6588	0.6669	0.6628	0.6715	0.6758

TABLE 9. DATA; $M = 3.0$, $\phi = 270^\circ$, $\alpha = 15^\circ$

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REFERENCES

1. Ausherman, D.W., Surface Pressure Measurements on a Double Delta Wing/Body Configuration at Mach 2 and Mach 3, NSWC MP 86-240, June, 1986. :

NOMENCLATURE

d	body diameter, inches
M	Mach number
p	surface pressure, psia
p _o	supply pressure, psia
r	radial distance from the model centerline, inches
T _o	supply temperature, degrees F
z	axial distance from the nosetip, inches
α	alpha, model angle of attack, degrees
θ	theta, angular position of pressure tap, degrees
φ	phi, model roll angle, degrees

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APPENDIX

TEST RESULTS

TEST MATRIX

RUN #	MACH #	α	ϕ	DATE
046	2.02	0	0.0	4/30/85
047	2.02	5	0.0	4/30/85
048	2.02	10	0.0	4/30/85
049	2.02	15	0.0	4/30/85
050	2.02	0	22.5	4/30/85
051	2.02	5	22.5	4/30/85
052	2.02	10	22.5	4/30/85
053	2.02	15	22.5	4/30/85
054	2.02	0	45.0	4/30/85
055	2.02	5	45.0	4/30/85
056	2.02	10	45.0	4/30/85
057	2.02	15	45.0	4/30/85
058	2.02	0	67.5	4/30/85
059	2.02	5	67.5	4/30/85
060	2.02	10	67.5	4/30/85
061	2.02	15	67.5	4/30/85
062	2.02	0	90.0	4/30/85
063	2.02	5	90.0	4/30/85
064	2.02	10	90.0	4/30/85
065	2.02	15	90.0	4/30/85
066	2.02	0	112.5	4/30/85
067	2.02	5	112.5	4/30/85
068	2.02	10	112.5	4/30/85
069	2.02	15	112.5	4/30/85
070	2.02	0	135.0	4/30/85
071	2.02	5	135.0	4/30/85
072	2.02	10	135.0	4/30/85
073	2.02	15	135.0	4/30/85
074	2.02	0	157.5	4/30/85
075	2.02	5	157.5	4/30/85
076	2.02	10	157.5	4/30/85
077	2.02	15	157.5	4/30/85
078	2.02	0	180.0	4/30/85
079	2.02	5	180.0	4/30/85
080	2.02	10	180.0	4/30/85
081	2.02	15	180.0	4/30/85
082	2.02	0	202.5	4/30/85
083	2.02	5	202.5	4/30/85
084	2.02	10	202.5	4/30/85
085	2.02	15	202.5	4/30/85
086	2.02	0	225.0	4/30/85
087	2.02	5	225.0	4/30/85
088	2.02	10	225.0	4/30/85
089	2.02	15	225.0	4/30/85
090	2.02	0	247.5	4/30/85
091	2.02	5	247.5	4/30/85

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RUN #	TEST MATRIX (CONTINUED)			DATE
	MACH #	α	\downarrow	
092	2.02	10	247.5	4/30/85
093	2.02	15	247.5	4/30/85
094	2.02	0	270.0	4/30/85
095	2.02	5	270.0	4/30/85
096	2.02	10	270.0	4/30/85
097	2.02	15	270.0	4/30/85
098	2.02	0	292.5	4/30/85
099	2.02	5	292.5	4/30/85
001	2.02	10	292.5	4/30/85
002	2.02	15	292.5	4/30/85
003	2.02	0	315.0	4/30/85
004	2.02	5	315.0	4/30/85
005	2.02	10	315.0	4/30/85
006	2.02	15	315.0	4/30/85
008	2.02	0	337.5	4/30/85
009	2.02	5	337.5	4/30/85
010	2.02	10	337.5	4/30/85
011	2.02	15	337.5	4/30/85
012	2.02	0	360.0	4/30/85
013	2.02	5	360.0	4/30/85
014	2.02	10	360.0	4/30/85
015	2.02	15	360.0	4/30/85
024	3.02	0	0.0	4/30/85
025	3.02	5	0.0	4/30/85
026	3.02	10	0.0	4/30/85
027	3.02	15	0.0	4/30/85
028	3.02	0	22.5	4/30/85
029	3.02	5	22.5	4/30/85
030	3.02	10	22.5	4/30/85
031	3.02	15	22.5	4/30/85
032	3.02	0	45.0	4/30/85
033	3.02	5	45.0	4/30/85
034	3.02	10	45.0	4/30/85
035	3.02	15	45.0	4/30/85
036	3.02	0	67.5	4/30/85
037	3.02	5	67.5	4/30/85
038	3.02	10	67.5	4/30/85
039	3.02	15	67.5	4/30/85
040	3.02	0	90.0	4/30/85
041	3.02	5	90.0	4/30/85
042	3.02	10	90.0	4/30/85

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TEST MATRIX (CONTINUED)				
RUN #	MACH #	α	ϕ	DATE
043	3.02	15	90.0	4/30/85
044	3.02	0	112.5	4/30/85
045	3.02	5	112.5	4/30/85
046	3.02	10	112.5	4/30/85
047	3.02	15	112.5	4/30/85
048	3.02	0	135.0	4/30/85
049	3.02	5	135.0	4/30/85
050	3.02	10	135.0	4/30/85
051	3.02	15	135.0	4/30/85
052	3.02	0	157.5	4/30/85
053	3.02	5	157.5	4/30/85
054	3.02	10	157.5	4/30/85
055	3.02	15	157.5	4/30/85
056	3.02	0	180.0	4/30/85
057	3.02	5	180.0	4/30/85
058	3.02	10	180.0	4/30/85
059	3.02	15	180.0	4/30/85
060	3.02	0	202.5	4/30/85
061	3.02	5	202.5	4/30/85
062	3.02	10	202.5	4/30/85
063	3.02	15	202.5	4/30/83
064	3.02	0	225.0	4/30/85
065	3.02	5	225.0	4/30/85
066	3.02	10	225.0	4/30/85
067	3.02	15	225.0	4/30/85
068	3.02	0	247.5	4/30/85
069	3.02	5	247.5	4/30/85
070	3.02	10	247.5	4/30/85
071	3.02	15	247.5	4/30/85
072	3.02	0	270.0	4/30/85
073	3.02	5	270.0	4/30/85
074	3.02	10	270.0	4/30/85
075	3.02	15	270.0	4/30/85
076	3.02	0	292.5	4/30/85
077	3.02	5	292.5	4/30/85
078	3.02	10	292.5	4/30/85
079	3.02	15	292.5	4/30/85
080	3.02	0	315.0	4/30/85
081	3.02	5	315.0	4/30/85
082	3.02	10	315.0	4/30/85
083	3.02	15	315.0	4/30/85
084	3.02	0	337.5	4/30/85
085	3.02	5	337.5	4/30/85
086	3.02	10	337.5	4/30/85

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RUN #	TEST MATRIX (CONTINUED)			DATE
	MACH #	α	ϕ	
087	3.02	15	337.5	4/30/85
088	3.02	0	360.0	4/30/85
089	3.02	5	360.0	4/30/85
090	3.02	10	360.0	4/30/85
091	3.02	15	360.0	4/30/85
009	4.00	0	0.0	5/06/85
010	4.00	5	0.0	5/06/85
011	4.00	10	0.0	5/06/85
012	4.00	15	0.0	5/06/85
013	4.00	0	22.5	5/06/85
014	4.00	5	22.5	5/06/85
015	4.00	10	22.5	5/06/85
016	4.00	15	22.5	5/06/85
017	4.00	0	45.0	5/06/85
018	4.00	5	45.0	5/06/85
019	4.00	10	45.0	5/06/85
020	4.00	15	45.0	5/06/85
021	4.00	0	67.5	5/06/85
022	4.00	5	67.5	5/06/85
023	4.00	10	67.5	5/06/85
024	4.00	15	67.5	5/06/85
025	4.00	0	90.0	5/06/85
026	4.00	5	90.0	5/06/85
027	4.00	10	90.0	5/06/85
028	4.00	15	90.0	5/06/85
029	4.00	0	112.5	5/06/85
030	4.00	5	112.5	5/06/85
031	4.00	10	112.5	5/06/85
032	4.00	15	112.5	5/06/85
033	4.00	0	135.0	5/06/85
034	4.00	5	135.0	5/06/85
035	4.00	10	135.0	5/06/85
036	4.00	15	135.0	5/06/85
037	4.00	0	157.5	5/06/85
038	4.00	5	157.5	5/06/85
039	4.00	10	157.5	5/06/85
040	4.00	15	157.5	5/06/85
041	4.00	0	180.0	5/06/85
042	4.00	5	180.0	5/06/85
043	4.00	10	180.0	5/06/85
044	4.00	15	180.0	5/06/85
046	4.00	0	202.5	5/06/85
047	4.00	5	202.5	5/06/85
048	4.00	10	202.5	5/06/85

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RUN #	TEST MATRIX (CONTINUED)				DATE
	MACH #	α	ϕ		
049	4.00	15	202.5		5/06/83
050	4.00	0	225.0		5/06/85
051	4.00	5	225.0		5/06/85
052	4.00	10	225.0		5/06/85
053	4.00	15	225.0		5/06/85
054	4.00	0	247.5		5/06/85
055	4.00	5	247.5		5/06/85
056	4.00	10	247.5		5/06/85
057	4.00	15	247.5		5/06/85
058	4.00	0	270.0		5/06/85
059	4.00	5	270.0		5/06/85
060	4.00	10	270.0		5/06/85
061	4.00	15	270.0		5/06/85
062	4.00	0	292.5		5/06/85
063	4.00	5	292.5		5/06/85
064	4.00	10	292.5		5/06/85
065	4.00	15	292.5		5/06/85
066	4.00	0	315.0		5/06/85
067	4.00	5	315.0		5/06/85
068	4.00	10	315.0		5/06/85
069	4.00	15	315.0		5/06/85
070	4.00	0	337.5		5/06/85
071	4.00	5	337.5		5/06/85
072	4.00	10	337.5		5/06/85
073	4.00	15	337.5		5/06/85
074	4.00	0	360.0		5/06/85
075	4.00	5	360.0		5/06/85
076	4.00	10	360.0		5/06/85

WIR1421
RUN 46

WHITE OAK LABORATORY

TUNNEL 12 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPHI -0.09 deg PHII -1.47 deg TO 110.49 degF MACH 2.0

PO 14.80 psia SCALE FACTOR: 1.0000

WIR1421
RUN 46

BODY PRESSURES (PSI)

z/d	theta:	13.5	28.5	43.5	58.5	73.5
0.5	3.0826					
1.0	2.6387					
1.5	2.2423	2.2652	2.2714	2.2622	2.2535	2.2242, 2.2765
2.0	1.9287	1.7615	1.7538	1.7523	1.7332	1.8955, 1.8983
2.5	1.7700					1.7371
3.0	1.5716					
3.5	1.6306	1.6314	1.6261	1.6427	1.6572	1.6704
4.0	1.6928	1.5398	1.6916	1.7087	1.7179	1.7507
4.3	1.7094	1.7086	1.7252	1.7142	1.7449	1.7496
4.5	1.7173	1.7167	1.7210	1.7298	1.7636	1.8058
4.8	1.7406	1.7406	1.7694	1.7571	1.7731	1.7610
5.0	1.7623	1.7801	1.7845	1.7964	1.7791	1.8066
5.5	1.8021	1.8093	1.7839	1.8016	1.8107	1.8102
6.0	1.8297	1.8141	1.8139	1.8199	1.8211	1.8020
6.5	1.8473	1.8267	1.8252	1.8271	1.8387	1.8257
7.0	1.8692	1.8665	1.8355	1.8120	1.8280	1.8549
7.5	1.8694	1.8827	1.9047	1.8370	1.8487	1.8459
8.0	1.8549	1.8568	1.8624	1.8643	1.7674	1.8741

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.7392*							
3.875	1.7368+							
4.125	1.7741							
4.375	1.80971							
4.625	1.7867							
4.875	1.7788	1.8121						
5.125	1.7771	1.7857						
5.375	1.7767	1.7795						
5.625	1.7965, 0.8042	1.7945	1.7799					
5.875	1.7886	0.7982	0.8043	0.8104				
6.125		1.7988	1.7884					
6.375	1.8362	1.8025	1.8126	1.8220	1.7600			
6.625	1.8282	1.8400	1.8348	1.8192	1.8064			
6.875	1.8346	1.8357	1.8410	1.8486	1.8200			
7.125	1.8297	1.8278	1.8511	1.8364	1.8390	1.8165	1.8037, 1.8474	
7.375	1.8261	1.8411	1.8367	1.8402	1.8181	1.7986	1.7877	1.7635
		1.8276	1.8474	1.8331	1.8189			

WHITE OAK LABORATORY

WIR1421
RUN 47

ALPH 4.94 deg PHI 1.39 deg
TUNNEL 12 PRESSURE TEST
PSI CONFIGURATION PSI#1(FR/10) PSI#2(1C/1)

1.39 deg
AVERAGED DATA

P0 14.80 psia
SCALE FACTOR: 1.0000

10 111.00 degf
MACII 2.0

BODY PRESSURES (PSI)

z/d	theta:	13.6	28.6	43.6	58.6	73.6
0.5	-1.4					
1.0	3.0220					
1.5	2.5888					
2.0	2.1872	2.1271	2.0699	2.0191	1.9929	1.9583, 2.6194
2.5	1.8636					1.6961, 2.1795
3.0	1.7022	1.6505	1.6083	1.5985	1.5857	1.6034
3.5	1.4938					
4.0	1.5264	1.5117	1.4866	1.5185	1.6064	1.6332
4.3	1.5661	1.5263	1.5575	1.6230	1.6819	1.7475
4.5	1.5762	1.5739	1.6196	1.6498	1.6933	1.7498
4.8	1.5696	1.5778	1.6043	1.6604	1.7447	1.7927
5.0	1.5892	1.6099	1.6851	1.7116	1.7586	1.7609
5.5	1.6175	1.6586	1.7019	1.7594	1.7694	1.8114
6.0	1.6845	1.7204	1.7315	1.7820	1.8021	1.8172
6.5	1.7098	1.7147	1.7518	1.7963	1.8168	1.8240
7.0	1.7309	1.7245	1.7650	1.8025	1.8363	1.8410
7.5	1.7449	1.7670	1.7713	1.7852	1.8147	1.8610
8.0	1.7394	1.7799	1.8421	1.8088	1.8359	1.8431
	1.7422	1.7473	1.7975	1.8014	1.7851	1.8554

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.7422*							
3.875	1.7396*							
4.125	1.7911							
4.375	1.8309							
4.625	1.8183	1.8331						
4.875	1.7977	1.8178						
5.125	1.8098	1.8114	1.7986					
5.375	1.8072	1.8253	1.8267					
5.625	1.8295, 0.8358	0.8276	0.8332	0.8363				
5.875	1.8226	1.8311	1.8161					
6.125		1.8370	1.8437	1.8513	1.7962			
6.375	1.8710	1.8760	1.8701	1.8506	1.8405			
6.625	1.8577			1.8843	1.8534	1.8408		
6.875	1.8649	1.8701	1.8783	1.8714	1.8752	1.8403, 1.8293		
7.125	1.8569	1.8623	1.8868	1.8718	1.8548	1.8357		
7.375	1.8455	1.8540	1.8690	1.8718	1.8548	1.8153	1.7949	
			1.8760	1.8636	1.8486			

WIR1421
RUN 48

WHITE OAK LABORATORY

TUNNEL 12 PRESSURE TEST

PSI CONFIGURATION PSIN1(PR/10) PSIN2(TC/1)

ALPH 9.94 deg PIII -1.50 deg P0 14.79 psia TO 111.55 degf MACII 2.0

SCALE FACTOR: 1.0000

theta: -1.5

z/d	13.5	28.5	43.5	58.5	73.5
0.5	1.8803	1.7868	1.7504	1.7531	1.7583, 3.0757
1.0	1.3986	1.3545	1.3965	1.4509	1.5641, 2.5552
1.5	1.1728	1.1887	1.3535	1.5059	1.5191
2.0	1.5093	1.2562	1.4997	1.5982	1.5910
2.5	1.1386	1.3530	1.5410	1.6139	1.6923
3.0	1.1081	1.3642	1.5618	1.6436	1.6793
3.5	1.1349	1.4795	1.6121	1.6507	1.7177
4.0	1.2090	1.5341	1.6661	1.6462	1.6665
4.3	1.3874	1.5763	1.6843	1.6828	1.7125
4.5	1.4594	1.6104	1.6982	1.6831	1.7183
5.0	1.5380	1.6491	1.6879	1.6908	1.6993
5.5	1.6212	1.6779	1.6625	1.6503	1.6982
6.0	1.6487	1.7620	1.6971	1.6549	1.7058
6.5	1.5013	1.7272	1.7335	1.6821	1.6821
7.0				1.6235	1.7075
7.5					
8.0					

WING PRESSURES (PSI)

z/d	r/d: 0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.7485*						
3.875	1.7458*						
4.125	1.8191						
4.375	1.87301						
4.625	1.8631						
4.875	1.8415						
5.125	1.8259						
5.375	1.8292						
5.625	1.9938, 0.8575						
5.875	1.8405						
6.125							
6.375	1.8591						
6.625	1.8370						
6.875	1.8295						
7.125	1.8118						
7.375	1.7897						
		1.8740	1.8420	1.8661	1.8621	1.8421	
		1.8625	1.8274	1.8743	0.8744	1.9046	
		1.8699	0.8842	1.8621	1.8982	1.8983	
		1.8861	1.8621	1.8982	1.9163	1.8869	
		1.8788	1.8982	1.9064	1.9163	1.8869	
		1.8892	1.9214	1.9259	1.9259	1.8880	
		1.8763	1.9234	1.9094	1.9113	1.8735, 1.9281	
		1.8767	1.9024	1.9090	1.8844	1.8657	
		1.8417	1.9067	1.8974	1.8818	1.8406	1.8174

WILLIE OAK LABORATORY

WTR1421
RUN 49WTR1421
RUN 49TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)

ALPH	14.98 deg	PIII	-1.63 deg AVERAGED DATA	P0	14.80 psia SCALE FACTOR:	T0	112.01 degF	MACH	2.0
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BODY PRESSURES (PSI)

z/d	theta:	13.4	28.4	43.4	58.4	73.4
0.5	-1.6					
1.0	2.6871					
1.5	2.2300					
2.0	1.8288	1.5501	1.4067	1.4086	1.5133	1.6007, 3.6316
2.5	1.4965	1.0416	0.9215	1.0913	1.3076	1.4472, 3.0165
3.0	1.2945					1.4263
3.5	1.0460					
4.0	0.9676	0.7314	0.7036	1.0847	1.3368	1.4430
4.3	0.9155	0.7279	0.8158	1.0689	1.3272	1.4779
4.5	0.8766	0.7096	0.9705	1.0628	1.2757	1.4156
4.8	0.8151	0.7154	1.0258	1.0387	1.2046	1.4793
5.0	0.8231	0.7543	1.1747	1.0950	1.0897	1.4163
5.5	0.7758	0.9219	1.2600	1.1664	0.9583	1.4429
6.0	0.8269	1.1972	1.2464	1.1973	0.8544	1.4717
6.5	1.0905	1.2868	1.3249	1.1725	0.8149	1.4993
7.0	1.3282	1.3954	1.3378	1.1612	0.9091	1.4266
7.5	1.4527	1.4740	1.3664	1.2101	0.9760	1.3707
8.0	1.4779	1.4909	1.4668	1.3223	1.2068	1.2877
	1.4656	1.4785	1.4470	1.4606	1.3762	1.3804

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.7356*							
3.875	1.7330*							
4.125	1.8717							
4.375	1.90821							
4.625	1.8930							
4.875	1.8777							
5.125	1.7907							
5.375	1.7887							
5.625	2.3069, 0.7852							
5.875	1.7164							
6.125								
6.375	1.6599							
6.625	1.6073							
6.875	1.5778							
7.125	1.5355							
7.375	1.4981							
		1.9088	1.8778	1.8886	0.8856	1.8387		
		1.8935	1.8886	0.8827	1.8309	1.8829		
		1.7929	1.8428	1.8310	1.8310	1.8829		
		1.8428	1.8423	1.8423	1.8423	1.8823		
		1.7708	1.8047	1.8229	1.9100	1.9012		
		0.8185	1.7454	1.8047	1.8808	1.9160		
		1.7365	1.7106	1.8270	1.8652	1.8838		
		1.7323			1.8270	1.8694		
		1.6806						
		1.6327						
		1.5968						
		1.5267						
							1.9011	
							1.8926, 2.1555	
							1.8794	
							1.8488	
								1.8303

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/I)									
ALPH	-0.08 deg	PHI	21.20 deg AVERAGED DATA	PO	14.77 psia SCALE FACTOR	IO	112.97 degF	MACI	2.0
BODY PRESSURES (PSI)									
z/d	theta:	21.2	36.2	51.2	66.2	81.2	96.2		
0.5	3.0689								
1.0	2.6201								
1.5	2.2289								
2.0	1.9181								
2.5	1.7652		2.2520	2.2617	2.2490	2.2378	2.2138, 2.2777		
3.0	1.5641		1.7566	1.7483	1.7442	1.7291	1.8846, 1.8902		
3.5	1.6381						1.7349		
4.0	1.6954		1.6390	1.6312	1.6269	1.6440	1.6605		
4.3	1.7068		0.7414	1.6867	1.7067	1.7224	1.7554		
4.5	1.7116		1.7049	1.7253	1.7118	1.7477	1.7443		
4.8	1.7359		1.7102	1.7196	1.7252	1.7589	1.7994		
5.0	1.7564		1.7353	1.7692	1.7502	1.7717	1.7527		
5.5	1.7922		1.7786	1.7833	1.7983	1.7709	1.8046		
6.0	1.8214		1.8011	1.7754	1.7966	1.8035	1.8006		
6.5	1.8442		1.8032	1.8068	1.8159	1.8153	1.7984		
7.0	1.8590		1.8181	1.8153	1.8201	1.8277	1.8188		
7.5	1.8609		1.8560	1.8241	1.8011	1.8140	1.8466		
8.0	1.8449		1.8756	1.8990	1.8255	1.8414	1.8313		
			1.8472	1.8477	1.8503	1.7651	1.8767		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	1.7315*								
3.875	1.7288*								
4.125	1.7711								
4.375	1.8092	1.7740							
4.625	1.7776								
4.875	1.7676								
5.125	1.7685								
5.375	1.7672								
5.625	1.7855, 0.7936								
5.875	1.7824				0.7999				
6.125									
6.375	1.8315				1.8143	1.7480			
6.625	1.8181				1.8118	1.7994			
6.875	1.8253				1.8367	1.8114			
7.125	1.8201				1.8277	1.8008, 1.8340			
7.375	1.8105				1.8336	1.8023			
					1.8317	1.7821			
							1.7451		

WHITE OAK LABORATORY

WTR1421
RUN 52

ALPH 4.97 deg PHI 21.0

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

21.02 deg P0 14.75 psia 10 114.96 degF 96.0
AVERAGED DATA SCALE FACTOR: 1.0000

MACII 2.0

BODY PRESSURES (PSI)

z/d	theta:	36.0	51.0	66.0	81.0	96.0
0.5	2.8189					
1.0	2.4114					
1.5	2.0399					
2.0	1.7602	2.0162	1.9938	1.9763	1.9602	1.9467, 2.5424
2.5	1.6295	1.6044	1.5897	1.6013	1.5901	1.6884, 2.1037
3.0	1.4375					1.6021
3.5	1.5015	1.5241	1.5115	1.5581	1.5752	1.5480
4.0	1.5569	1.5497	1.5950	1.6340	1.6475	1.6522
4.3	1.5755	1.5971	1.6451	1.6418	1.6508	1.6571
4.5	1.5598	1.5954	1.6116	1.6302	1.6933	1.7117
4.8	1.5798	1.6093	1.6775	1.6754	1.7028	1.6753
5.0	1.5896	1.6528	1.6879	1.7270	1.7028	1.7361
5.5	1.6391	1.6836	1.6798	1.7209	1.7336	1.7380
6.0	1.6575	1.6698	1.6997	1.7307	1.7447	1.7435
6.5	1.6792	1.6809	1.7015	1.7251	1.7586	1.7609
7.0	1.6907	1.7157	1.6980	1.6993	1.7336	1.7867
7.5	1.6841	1.7227	1.7704	1.7185	1.7577	1.7494
8.0	1.6701	1.6773	1.7269	1.7324	1.7494	1.8557

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.5972+							
3.875	1.5925+							
4.125	1.5171							
4.375	1.62921	1.5232						
4.625	1.7577	1.6355						
4.875	1.2556	1.7567						
5.125	1.7140	1.7174	1.2590					
5.375	1.7152	1.7380	1.6474					
5.625	1.6996, 0.7472	0.7478	0.7912	0.2837				
5.875	1.7294	1.7347	1.7412					
6.125		1.7410	1.7620	1.7192	1.3316			
6.375	1.7828	1.7819	1.7852	1.7878	1.3268			
6.625	1.7600	1.7798	1.7867	1.8248	1.4548	1.4440		
6.875	1.7695	1.7614	1.7987	1.7882	1.7421	1.4063, 1.2602		
7.125	1.7643	1.7685	1.7667	1.7807	1.7924	1.3224		
7.375	1.7595	1.7580	1.7782	1.7822	1.7867	1.4767	1.4414	

WHITE OAK LABORATORY									
WIR1421 RUN 53		TUNNEL T2 PRESSURE TEST		PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/I)		WIR1421 RUN 53			
ALPH	9.94 deg	PI#1	21.11 deg	PO	14.75 psi _a	TO	115.30 degF	MACH	2.0
		AVERAGED DATA		SCALE FACTOR:		1.0000			

z/d	theta:	BODY PRESSURES (PSI)				
		36.1	51.1	66.1	81.1	96.1
0.5	21.1					
	2.5102					
	2.1225					
1.5	1.7680					
2.0	1.5062					
2.5	1.3694	1.7376	1.7477	1.7656	1.7775	1.7586, 2.8539
3.0	1.1654	1.3741	1.4291	1.4988	1.5136	1.5735, 2.3378
3.5	1.1702					1.5304
4.0	1.1892	1.2932	1.4066	1.4996	1.5739	1.4997
4.3	1.2023	1.5316	1.4930	1.5493	1.5833	1.5534
4.5	1.1906	1.4043	1.5186	1.5278	1.5702	1.5628
4.8	1.2318	1.3992	1.4734	1.5025	1.6057	1.6377
5.0	1.2549	1.4132	1.5209	1.5208	1.6031	1.6076
5.5	1.3310	1.4593	1.5291	1.5624	1.5882	1.6839
6.0	1.3656	1.4828	1.5041	1.5357	1.6102	1.6940
6.5	1.4121	1.4720	1.5291	1.5360	1.5916	1.6785
7.0	1.4512	1.4777	1.5213	1.5167	1.5763	1.7013
7.5	1.4638	1.5286	1.5090	1.4783	1.5300	1.7148
8.0	1.4615	1.5444	1.5832	1.4904	1.5365	1.6742
		1.4745	1.5544	1.5650	1.4944	1.7432

WING PRESSURES (PSI)

z/d	$r/d:$	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.4253*							
3.875	1.4180†							
4.125	1.1612							
4.375	1.3178†							
4.625	1.6577							
4.875	1.0109		1.3304					
5.125	1.6761		1.6561					
5.375	1.6791		1.6799					
5.625	1.7073		1.7062	1.0158				
5.875	1.6899		0.7028	1.4355	0.0906			
6.125	1.7433		1.6966	0.6915				
6.375	1.7205		1.6991	1.6860	1.5646	1.1518		
6.625	1.7222		1.7421	1.7148	1.6971	1.1499		
6.875	1.7129		1.7411	1.7408	1.7542	1.3629	1.2648	
7.125	1.7021		1.7217	1.7526	1.7420	1.6208	1.1996, 1.1062	
7.375			1.7255	1.7619	1.7400	1.6718	1.2286	
			1.7105	1.7372	1.7260	1.7102	1.4187	1.2654

WHITE OAK LABORATORY

WIR1421
RUN 54WIR1421
RUN 54

ALPH 14.95 deg PHIL 21.01 deg P0 14.74 psia IO 115.60 degF MACH 2.0

TUNNEL 12 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/IO) PSI#2(IC/I)

PSI CONFIGURATION PSI#1(PR/IO) PSI#2(IC/I)

21.01 deg
AVERAGED DATA

SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	36.0	51.0	66.0	81.0	96.0
0.5	2.1310					
1.0	1.7315					
1.5	1.3924	1.3707	1.4653	1.6004	1.6569	1.6435, 3.2173
2.0	1.1353					1.4718, 2.6465
2.5	0.9535	0.9746	1.2366	1.3913	1.4417	1.4573
3.0	0.7203					
3.5	0.6415	0.8617	1.2418	1.3445	1.5611	1.4698
4.0	0.7590	1.5106	1.1885	1.3262	1.5356	1.4739
4.3	0.8120	0.9611	1.1041	1.2564	1.4935	1.4770
4.5	0.8478	0.8904	0.7601	1.1760	1.4883	1.5698
4.8	0.9731	0.8722	0.9278	1.1333	1.4633	1.5632
5.0	0.8789	0.9390	0.8597	1.1071	1.4145	1.6581
5.5	1.1104	1.0516	0.7934	0.9585	1.4555	1.6803
6.0	1.0680	1.0853	0.8849	0.8290	1.4953	1.6479
6.5	1.1448	1.1540	0.9863	0.8035	1.4928	1.6032
7.0	1.2528	1.2176	1.1144	0.8958	1.3600	1.5473
7.5	1.2746	1.2554	1.3145	1.1139	1.3129	1.4713
8.0	1.2793	1.2972	1.3194	1.3368	1.2637	1.4788

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.1977*							
3.875	1.1871*							
4.125	0.9206							
4.375	1.00021							
4.625	1.4775							
4.875	0.8771							
5.125	1.6883							
5.375	1.6836							
5.625	1.7586, 0.7095							
5.875	1.6612				0.9254			
6.125								
6.375	1.6790				1.4894	0.9562		
6.625	1.6128				1.6135	1.0799		
6.875	1.5783				1.6675	1.3210	1.0291	
7.125	1.5437				1.6396	1.5360	1.0368, 1.1346	
7.375	1.5253				1.6393	1.5775	1.2242	
					1.6313	1.6080	1.4008	1.0319

WIR1421
RUN 55

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPHI -0.08 deg PIII 43.90 deg PO 14.73 psia TO 116.02 degF MACH 2.0

AVERAGED DATA SCALE FACTOR: 1.0000

theta: 43.9

z/d 0.5 3.0424 58.9 73.9 88.9 103.9 118.9

1.0 2.6014

1.5 2.2051

2.0 1.9050

2.5 1.7634

3.0 1.5528

3.5 1.6465

4.0 1.6932

4.3 1.7017

4.5 1.7089

4.8 1.7314

5.0 1.7507

5.5 1.7802

6.0 1.8096

6.5 1.8370

7.0 1.8526

7.5 1.8502

8.0 1.8221

2.2387 2.2456 2.2357 2.2265 2.2095, 2.2805

1.7467 1.7392 1.7380 1.7208 1.8739, 1.8808

1.6363 1.6129 1.6137 1.6387 1.6588

1.5005 1.6835 1.7074 1.7147 1.7468

1.7016 1.7254 1.7036 1.7427 1.7276

1.7047 1.7143 1.7139 1.7495 1.7849

1.7266 1.7666 1.7407 1.7640 1.7377

1.7776 1.7809 1.7981 1.7585 1.7955

1.7913 1.7614 1.7871 1.7936 1.7970

1.7933 1.8001 1.8085 1.8017 1.7792

1.8062 1.8009 1.8036 1.8207 1.8064

1.8482 1.8080 1.7799 1.7953 1.8385

1.8654 1.8974 1.8081 1.8283 1.8116

1.8250 1.8262 1.8293 1.7771 1.8771

WING PRESSURES (PSI)

z/d r/d: 0.5935 0.7185 0.8435 0.9685 1.0935 1.2185 1.3435

3.625 1.7056* 1.7776 1.7533 1.7539 1.7761 1.7802 0.7811 1.8060 1.7263

3.875 1.7028* 1.7578 1.7539 1.7761 1.7802 1.7740 1.7782 1.8060 1.7912

4.125 1.7427 1.7525 1.7514 1.7542 1.7864 1.7553 1.8246 1.8063 1.7993

4.375 1.77421 1.7457 1.7587 1.7525 1.7514 1.7542 1.7864 1.7553 1.8246 1.8063

4.625 1.7587 1.7525 1.7514 1.7542 1.7864 1.7553 1.8246 1.8063 1.7993

4.875 1.7525 1.7514 1.7542 1.7864 1.7553 1.8246 1.8063 1.7993

5.125 1.7514 1.7542 1.7864 1.7553 1.8246 1.8063 1.7993

5.375 1.7542 1.7864 1.7553 1.8246 1.8063 1.7993

5.625 1.7689, 0.7864 1.7766 1.7782 1.8308 1.8255 1.8089 1.8170 1.8120 1.8369

5.875 1.7553 1.7766 1.7782 1.8308 1.8255 1.8089 1.8170 1.8120 1.8369

6.125 1.8246 1.8063 1.7993 1.7950 1.7903, 1.8151

6.375 1.8063 1.8134 1.8068 1.7917 1.7804 1.7183

6.625 1.8063 1.8134 1.8068 1.7917 1.7804 1.7183

6.875 1.8068 1.8068 1.8131 1.8088 1.8131 1.7183

7.125 1.8083 1.8083 1.8303 1.8303 1.8131 1.7183

7.375 1.8083 1.8083 1.8303 1.8303 1.8131 1.7183

WHITE OAK LABORATORY

WIR1421
RUN 56

ALPH 4.93 deg PHIT

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

43.82 deg PO 14.74 psia 10 116.50 degf 1.0000

MACH 2.0

SCALE FACTOR:

BODY PRESSURES (PSI)

z/d	theta:	58.8	73.8	88.8	103.8	118.8
0.5	43.8					
1.0	2.6796					
1.5	2.3002					
2.0	1.9554	1.9723	1.9796	1.9699	1.9616	1.9558, 2.4063
2.5	1.7129					1.6866, 1.9772
3.0	1.6112	1.6081	1.5975	1.6093	1.5794	1.5915
3.5	1.4402					
4.0	1.5365	1.5635	1.5548	1.5666	1.5688	1.4726
4.3	1.6087	1.4904	1.6339	1.6309	1.5849	1.5314
4.5	1.6226	1.6459	1.6674	1.6138	1.5813	1.5341
4.8	1.6022	1.6274	1.6177	1.5996	1.6136	1.5999
5.0	1.6074	1.6258	1.6763	1.6386	1.6289	1.5682
5.5	1.6067	1.6646	1.6763	1.6879	1.6177	1.6408
6.0	1.6305	1.6658	1.6426	1.6684	1.6562	1.6549
6.5	1.6431	1.6474	1.6636	1.6731	1.6623	1.6566
7.0	1.6627	1.6454	1.6534	1.6639	1.6870	1.6792
7.5	1.6699	1.6814	1.6474	1.6354	1.6544	1.7044
8.0	1.6557	1.6786	1.7242	1.6569	1.6885	1.6559
	1.6288	1.6371	1.6688	1.6765	1.7468	1.8551

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.3846*							
3.875	1.3772*							
4.125	0.8910							
4.375	0.97071							
4.625	1.4800							
4.875	1.0212							
5.125	1.6175							
5.375	1.6278							
5.625	1.5995, 0.6575							
5.875	1.6421							
6.125								
6.375	1.7036							
6.625	1.6816							
6.875	1.6878							
7.125	1.6843							
7.375	1.6744							
		0.9907						
		1.4772						
		1.6225						
		1.6557						
		0.6615						
		1.6599						
		1.6578						
		1.7034						
		1.7000						
		1.6813						
		1.6889						
		1.6723						
				0.8463	0.1574			
				1.5829				
				1.6646				
				1.6994				
				1.7169				
				1.7290				
				1.6869				
				1.7066				
				1.7094				
				1.0427				
				1.3632				
				1.5980				
				1.6666				
				1.7068				
				1.2528				
				1.2723, 1.1155				
				1.0726				
				1.2858				
				1.4907				
				1.0546				
				1.2379				

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)									
ALPH	9.94 deg	PHI	43.92 deg	PO	14.74 psia	TO	116.83 degF	MACI	2.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	58.9	73.9	88.9	103.9	118.9			
0.5	2.3124								
1.0	1.9815								
1.5	1.6810								
2.0	1.4966								
2.5	1.4118								
3.0	1.2687								
3.5	1.3847								
4.0	1.4717								
4.3	1.4799								
4.5	1.4452								
4.8	1.4404								
5.0	1.4289								
5.5	1.4164								
6.0	1.4170								
6.5	1.4292								
7.0	1.4338								
7.5	1.4220								
8.0	1.3989								
		1.7373	1.7750	1.7807	1.7538	1.7183, 2.4948			
		1.4760	1.5144	1.5297	1.4843	1.5143, 2.0154			
		1.4806	1.5248	1.5589	1.4870	1.4445			
		1.4802	1.5750	1.5896	1.4532	1.2844			
		1.5253	1.5870	1.5622	1.4377	1.2591			
		1.4910	1.5169	1.5279	1.4476	1.2429			
		1.4668	1.5445	1.5487	1.4466	1.3047			
		1.4855	1.5111	1.5752	1.4346	1.2848			
		1.4552	1.4373	1.5312	1.4721	1.3812			
		1.4068	1.4048	1.5031	1.4803	1.4590			
		1.3850	1.3729	1.4750	1.5127	1.4891			
		1.4231	1.3439	1.4380	1.5021	1.5460			
		1.4347	1.4248	1.4431	1.5021	1.5887			
		1.4137	1.3937	1.4088	1.5472	1.5605			
					1.6480	1.7981			
WING PRESSURES (PSI)									
z/d	r/d:	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435		
3.625	0.8474*								
3.875	0.8316*								
4.125	0.5580								
4.375	0.58361								
4.625	0.8472								
4.875	0.7652								
5.125	1.4427								
5.375	1.4717								
5.625	1.1770								
5.875	1.5257								
6.125									
6.375	1.6103								
6.625	1.5945								
6.875	1.6018								
7.125	1.5934								
7.375	1.5785								
		0.6115	0.7710	0.7426	0.9246	1.0067			
		0.8400	0.7018	0.9197	0.9576	1.0158, 0.7610			
		1.4507	0.8763	1.1324	0.8402	0.9354			
		1.3014	0.8763	1.2698	0.7737	0.8186			
		0.4098	0.8763	1.5305	0.9022				
		1.4541	0.8830	1.3666	1.0771				
		1.4866	0.7905	1.4338					
		1.5569	1.4066						
		1.5649	1.4848						
		1.5519	1.5305						
		1.5655	1.5238						
		1.5573	1.5420						

WHITE OAK LABORATORY									
TUNNEL 12 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	14.97 deg	PHI	44.04 deg	PO	14.76 psia	TO	116.98 degf	MACH	2.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	44.0	59.0	74.0	89.0	104.0	119.0		
0.5	1.9314								
1.0	1.6379								
1.5	1.3597								
2.0	1.1802		1.5181	1.6154	1.6609	1.5419	1.4783, 2.5899		
2.5	1.1349		1.3334	1.4099	1.4755	1.3813	1.3181, 2.0887		
3.0	1.0432						1.2762		
3.5	1.0988		1.3071	1.3876	1.5444	1.3433	1.1124		
4.0	0.9208		1.4675	1.4088	1.6179	1.2591	0.8830		
4.3	0.8611		1.1876	1.4232	1.5679	1.2130	0.8056		
4.5	0.7544		1.0790	1.3243	1.5002	1.2000	0.8725		
4.8	0.7445		0.9598	1.3349	1.5086	1.1836	0.8899		
5.0	0.8054		0.8816	1.2782	1.5027	1.1885	1.0693		
5.5	0.9064		0.7527	1.2077	1.3776	1.1671	1.2872		
6.0	0.9507		0.7897	1.1617	1.2814	1.2134	1.3614		
6.5	1.0367		0.9853	1.1185	1.2571	1.3078	1.3778		
7.0	1.1303		1.1787	1.0521	1.2482	1.3110	1.3994		
7.5	1.1713		1.2202	1.1624	1.2714	1.3606	1.3794		
8.0	1.1939		1.2142	1.1667	1.1884	1.5608	1.6233		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.7115*							
3.875	0.6937+							
4.125	0.4146							
4.375	0.43531							
4.625	0.6258							
4.875	0.5467							
5.125	1.3958							
5.375	1.4619							
5.625	0.8007							
5.875	1.5040							
6.125								
6.375	1.5331							
6.625	1.4680							
6.875	1.4456							
7.125	1.4223							
7.375	1.4095							
		0.4664	0.6175	0.5536	0.5252	0.6292		
		0.6175	1.4043	0.5252	0.5875	0.6184		
		1.0387	1.0387	0.5252	0.6875	0.8709		
		0.1935	0.1935	0.6875	0.6292	0.6666		
		1.2906	1.2906	0.8709	0.6184	0.6666		
		1.3462	1.0819	1.0819	0.8021	0.6898		
		1.4243	1.2089	1.2089	0.8021	0.6898		
		1.4260	1.2888	1.2888	0.9765	0.5851		
		1.4110	1.3354	1.3354	1.0766	0.6953		
		1.4227	1.3378	1.3378	1.1574	0.8059		
		1.4130	1.3707	1.3707	1.2223	0.9301		
							0.7496	
							0.7397, 0.5005	
							0.6248	
							0.5867	
							0.7620	

WHITE OAK LABORATORY

WTR1421
RUN 59

ALPHI -0.08 deg

TUNNEL 12 PRESSURE TEST

PSI CONFIGURATION PSIN1(PH/10) PSIN2(TC/1)

66.28 deg

P0 14.75 psia

SCALE FACTOR: 1.0000

10 117.38 degF

MACII 2.0

WTR1421
RUN 59

z/d	theta:	PHI	66.28 deg AVERAGED DATA	P0	14.75 psia	SCALE FACTOR:	10	117.38 degF	MACII
0.5	66.3	3.0135	81.3	96.3	111.3	126.3	141.3		
1.0		2.5716							
1.5		2.1822	2.2205	2.2328	2.2294	2.2240	2.2141, 2.2687		
2.0		1.8939	1.7416	1.7370	1.7357	1.7157	1.8758, 1.8762		
2.5		1.7565					1.7248		
3.0		1.5528							
3.5		1.6427	1.6286	1.6082	1.6164	1.6368	1.6509		
4.0		1.6946	1.4581	1.6863	1.7024	1.7046	1.7356		
4.3		1.7065	1.7066	1.7274	1.6955	1.7325	1.7113		
4.5		1.7121	1.7031	1.7098	1.7063	1.7398	1.7676		
4.8		1.7301	1.7245	1.7654	1.7365	1.7583	1.7202		
5.0		1.7500	1.7777	1.7807	1.7951	1.7474	1.7821		
5.5		1.7771	1.7888	1.7550	1.7824	1.7872	1.7864		
6.0		1.8089	1.7897	1.7964	1.8028	1.7931	1.7680		
6.5		1.8323	1.7983	1.7946	1.7942	1.8093	1.7983		
7.0		1.8476	1.8406	1.7941	1.7672	1.7855	1.8323		
7.5		1.8397	1.8554	1.8878	1.7915	1.8172	1.8014		
8.0		1.8082	1.8116	1.8410	1.8437	1.7819	1.8865		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.6869*							
3.875	1.6834*							
4.125	1.7115							
4.375	1.74921	1.7532						
4.625	1.7407	1.7393						
4.875	1.7103	1.7391						
5.125	1.7361	1.7665	1.7114					
5.375	1.7454	1.7669	1.7669					
5.625	1.7537, 0.7788	0.7667	0.7732	0.7365				
5.875	1.7519	1.7616	1.7511					
6.125		1.7650	1.7833	1.8023	1.6531			
6.375	1.8247	1.8275	1.8118	1.7974	1.7304			
6.625	1.7910	1.8155	1.8241	1.8363	1.7809			
6.875	1.8069	1.8000	1.8334	1.8083	1.8169			
7.125	1.7993	1.8087	1.7997	1.8245	1.8053			
7.375	1.7925	1.7969	1.8319	1.8219	1.8033			
						1.6860		
						1.7202, 1.7487		
						1.7397		
						1.7463		1.6017

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)									
ALPH	4.93 deg	PHI	66.21 deg	P0	14.75 psia	10	117.67 degf	MACH	2.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	66.2	81.2	96.2	111.2	126.2	141.2		
0.5	2.5925								
1.0	2.2277								
1.5	1.9090		1.9478	1.9610	1.9561	1.9571	1.9788, 2.2390		
2.0	1.6942						1.6915, 1.8249		
2.5	1.6180		1.6135	1.5956	1.5888	1.5488	1.5598		
3.0	1.4592								
3.5	1.5821		1.5909	1.5609	1.5564	1.5083	1.3819		
4.0	1.6661		1.4495	1.6328	1.5863	1.4981	1.4125		
4.3	1.6675		1.6678	1.6542	1.5631	1.4987	1.4062		
4.5	1.6309		1.6415	1.6016	1.5499	1.5360	1.4799		
4.8	1.6265		1.6305	1.6586	1.5872	1.5447	1.4516		
5.0	1.6154		1.6646	1.6523	1.6358	1.5355	1.5373		
5.5	1.6233		1.6540	1.6094	1.6098	1.5763	1.5687		
6.0	1.6291		1.6220	1.6212	1.6077	1.5837	1.5701		
6.5	1.6432		1.6183	1.6131	1.5974	1.6076	1.5994		
7.0	1.6484		1.6576	1.6095	1.5680	1.5744	1.6306		
7.5	1.6290		1.6548	1.6928	1.5905	1.6133	1.5927		
8.0	1.6006		1.6096	1.6492	1.6572	1.7344	1.8506		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.0177							
3.875	1.0043							
4.125	0.6742							
4.375	0.71101	0.6912						
4.625	0.8536	0.7360						
4.875	0.8555	0.8465						
5.125	1.5171	1.5237						
5.375	1.5371	1.4460	0.8607					
5.625	1.5048	0.5866	0.8567					
5.875	1.5525	0.5414	0.7929	0.9481				
6.125		1.5513	1.0246					
6.375	1.6253	1.5721	1.3339	0.9328	0.9778			
6.625	1.6037	1.6239	1.4790	0.7960	1.0452			
6.875	1.6148	1.6170	1.5646	0.9805	1.0310	1.0325		
7.125	1.6123	1.6078	1.6160	1.1902	0.9711	1.0413, 1.0017		
7.375	1.6004	1.6191	1.6018	1.3510	0.8006	1.0634		
		1.6008	1.6296	1.4784	0.8539	1.0535	1.0422	

WHITE OAK LABORATORY

WTR1421
RUN 61

ALPH 9.98 deg PHI 66.24 deg P0 14.75 psia 10 117.86 degF MACH 2.0

PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)

SCALE FACTOR: 1.0000

WTR1421
RUN 61

BODY PRESSURES (PSI)

z/d	theta:	81.2	96.2	111.2	126.2	141.2
0.5	2.2406					
1.0	1.9526					
1.5	1.7012	1.7637	1.7757	1.7372	1.6980	1.6786, 2.1193
2.0	1.5537					1.4370, 1.6955
2.5	1.5025	1.5313	1.5147	1.4694	1.3671	1.3110
3.0	1.3754					
3.5	1.5160	1.5785	1.5502	1.4662	1.3298	1.0917
4.0	1.5652	1.4433	1.5718	1.4471	1.3140	1.0625
4.3	1.5306	1.6167	1.5871	1.3949	1.3046	0.9831
4.5	1.4630	1.5745	1.5270	1.3573	1.2760	0.9727
4.8	1.4377	1.5523	1.5771	1.3680	1.2386	0.9595
5.0	1.4093	1.5623	1.5551	1.4021	1.1889	1.0785
5.5	1.3973	1.5457	1.5171	1.3985	1.2179	1.1700
6.0	1.3631	1.4750	1.4864	1.3913	1.2265	1.2214
6.5	1.3544	1.4448	1.4410	1.3638	1.2693	1.3053
7.0	1.3389	1.4568	1.4083	1.3189	1.2720	1.4009
7.5	1.3177	1.4330	1.4786	1.3425	1.3492	1.4571
8.0	1.3048	1.3222	1.4254	1.4398	1.6554	1.8053

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.4098*							
3.875	0.3875*							
4.125	0.3159							
4.375	0.37971	0.3377						
4.625	0.4202		0.4113					
4.875	0.5150		0.4101					
5.125	1.1858		1.1975	0.5224				
5.375	1.2258		0.8101	0.5754				
5.625	0.9347, 0.2848		0.9419	0.5084	0.6158			
5.875	1.2909		1.0385	0.5406				
6.125			1.1110	0.6989	0.6604	0.6567		
6.375	1.4058		1.2126	0.8263	0.5834	0.7287		
6.625	1.4150		1.2638	0.9589	0.5702	0.7254	0.7207	
6.875	1.4422		1.2776	1.0566	0.6454	0.7117	0.7421, 0.6327	
7.125	1.4524		1.3197	1.1157	0.7389	0.6128	0.7416	
7.375	1.4780		1.3552	1.1863	0.8491	0.5526	0.7417	0.7191

WIR1421
RUN 62

WIR1421
RUN 62

WITTE OAK LABORATORY

TURBULENCE PRESSURE TEST

PSI CONFIGURATION PS1W1(PR/10) PS1W2(IC/1)

66.38 deg 14.76 psia 10 118.09 degf 2.0

AVG DATA SCALE FACTOR 1.0000

WING PRESSURES (PSI)

z/d	r/d	theta	PHI	66.38 deg AVG DATA	P0	14.76 psia SCALE FACTOR	10	118.09 degf	MACH
0.5		1.9621	66.4	81.4	96.4	111.4	126.4	141.4	
1.0		1.6967							
1.5		1.4949							
2.0		1.4127							
2.5		1.3789							
3.0		1.2579							
3.5		1.3135							
4.0		1.2810							
4.3		1.1973							
4.5		1.0976							
4.8		1.0292							
5.0		0.9749							
5.5		0.9747							
6.0		1.0276							
6.5		1.0364							
7.0		1.0025							
7.5		0.9725							
8.0		0.9031							

WING PRESSURES (PSI)

z/d	r/d	theta	PHI	66.38 deg AVG DATA	P0	14.76 psia SCALE FACTOR	10	118.09 degf	MACH
3.625	0.5008*								
3.875	0.4799†								
4.125	0.3301								
4.375	0.3378†	0.3516							
4.625	0.4650								
4.875	0.3838								
5.125	0.7331								
5.375	0.7804								
5.625	0.5852, 0.8503								
5.875	0.8430								
6.125									
6.375	1.0137								
6.625	1.0004								
6.875	1.0292								
7.125	1.0246								
7.375	1.0755								

WTR1421
RUN 63

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)

ALPH -0.11 deg PIH 88.74 deg PO 14.76 psia TO 118.57 degF MACII 2.0

SCALE FACTOR: 1.0000

theta: 88.7

z/d 0.5 3.0043 103.7 118.7 133.7 148.7 163.7

1.0 2.5654

1.5 2.1744

2.0 1.8898

2.5 1.7555

3.0 1.5509

3.5 1.6379

4.0 1.7062

4.3 1.7128

4.5 1.7131

4.8 1.7316

5.0 1.7525

5.5 1.7766

6.0 1.8079

6.5 1.8296

7.0 1.8439

7.5 1.8352

8.0 1.8114

2.2161 2.2305 2.2345 2.2278 2.2174, 2.2645

1.7411 1.7348 1.7311 1.7103 1.8796, 1.8665

1.6285 1.6147 1.6152 1.6319 1.6417

1.4208 1.6816 1.6973 1.7000 1.7321

1.7072 1.7230 1.6888 1.7296 1.7087

1.7029 1.7084 1.7022 1.7348 1.7647

1.7256 1.7689 1.7362 1.7553 1.7101

1.7810 1.7806 1.7952 1.7419 1.7768

1.7889 1.7529 1.7809 1.7806 1.7839

1.7869 1.7931 1.7971 1.7843 1.7722

1.7961 1.7933 1.7930 1.8114 1.8041

1.8384 1.7914 1.7643 1.7830 1.8341

1.8466 1.8797 1.7861 1.8215 1.8078

1.8146 1.8285 1.8314 1.7784 1.9001

WING PRESSURES (PSI)

z/d r/d: 0.5935 0.7185 0.8435 0.9685 1.0935 1.2185 1.3435

3.625 1.6821* 1.7412

3.875 1.6781* 1.7244

4.125 1.7052 1.7341

4.375 1.7372 1.7087 1.6902

4.625 1.7250 1.7615

4.875 1.6892 1.7569

5.125 1.7310 1.7654

5.375 1.7392 1.7548

5.625 1.7518, 0.7758 1.7705

5.875 1.7521 1.7638

6.125 1.7521 1.7705

6.375 1.8169 1.7845

6.625 1.8001 1.8087

6.875 1.8062 1.8217

7.125 1.8025 1.8085

7.375 1.7972 1.8132

1.8076 1.8202 1.8061

1.8206 1.7986 1.8059

1.8345 1.7695 1.5998

1.8449 1.8396 1.6888

1.8076 1.8217 1.7974

1.8132 1.8085 1.7695

1.8032 1.8032 1.6414

1.8032 1.8032 1.6606, 1.7175

1.8032 1.8032 1.6871

1.8032 1.8032 1.7348

1.8032 1.8032 1.5663

WIR1421
RUN 64

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSIN1(PR/10) PSIN2(1C/1)

ALPH 4.92 deg PHI 88.94 deg PO 14.76 psia TO 118.72 degf MACH 2.0

88.94 deg
AVERAGED DATA

SCALE FACTOR: 1.0000

z/d theta: 88.9

0.5	2.5552	103.9	118.9	133.9	148.9	163.9
1.0	2.2107					
1.5	1.8944	1.9381	1.9540	1.9700	1.9948	2.0472, 2.1013
2.0	1.6932					1.7366, 1.7173
2.5	1.6217	1.6011	1.5760	1.5638	1.5302	1.5701
3.0	1.4669					
3.5	1.5963	1.5980	1.5429	1.5036	1.4562	1.3452
4.0	1.6964	1.4147	1.5917	1.5252	1.4321	1.3630
4.3	1.6860	1.6590	1.6177	1.5104	1.4409	1.3436
4.5	1.6453	1.6317	1.5738	1.5058	1.4856	1.4114
4.8	1.6353	1.6185	1.6284	1.5440	1.4943	1.3822
5.0	1.6244	1.6529	1.6221	1.5962	1.4864	1.4689
5.5	1.6352	1.6409	1.5696	1.5701	1.5384	1.5150
6.0	1.6336	1.6027	1.5855	1.5746	1.5457	1.5254
6.5	1.6469	1.6004	1.5784	1.5646	1.5733	1.5622
7.0	1.6516	1.6403	1.5707	1.5353	1.5390	1.5935
7.5	1.6323	1.6331	1.6508	1.5519	1.5827	1.5688
8.0	1.6106	1.6196	1.6145	1.6236	1.7214	1.8594

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.8304*							
3.875	0.8140*							
4.125	0.6584	0.6201						
4.375	0.6378							
4.625	0.6091	0.6846						
4.875	0.7430	0.6004						
5.125	1.4473	1.4552	0.7489					
5.375	1.4756	1.1668	0.7801					
5.625	1.4982, 0.5424	0.3632	0.7167	0.8038				
5.875	1.5208	1.4624	0.6663					
6.125		1.5005	0.9425	0.8829	0.8564			
6.375	1.5949	1.5680	1.1622	0.8095	0.8966			
6.625	1.5718	1.5742	1.3570	0.7649	0.9209			
6.875	1.5733	1.5545	1.4560	0.7959	0.9497			
7.125	1.5755	1.5842	1.4965	0.9524	0.8592			
7.375	1.5841	1.5780	1.5486	1.1120	0.7797			
						0.9672		
						0.9467, 0.9470		
						0.9270		
						0.9454		
							0.9850	

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	9.96 deg	PHI	88.44 deg	P0	14.77 psia	TO	118.79 degF	MACH	2.0
			AVERAGED DATA		SCALE FACTOR:	1.0000			
BODY PRESSURES (PSI)									
z/d	theta:	88.4	103.4	118.4	133.4	148.4	163.4		
0.5	2.2308								
1.0	1.9600								
1.5	1.7202		1.7485	1.7224	1.6839	1.6903	1.7799, 1.8338		
2.0	1.5872						1.4638, 1.4539		
2.5	1.5449		1.5118	1.4300	1.3366	1.2447	1.2920		
3.0	1.4247								
3.5	1.5993		1.5624	1.4529	1.3008	1.0783	0.9511		
4.0	1.6745		1.4080	1.4477	1.3614	1.1614	0.9369		
4.3	1.6485		1.5472	1.4516	1.3466	1.2360	0.8603		
4.5	1.6092		1.4934	1.3757	1.3303	1.2804	0.8239		
4.8	1.5855		1.4804	1.4068	1.3498	1.2629	0.7253		
5.0	1.5651		1.5090	1.3787	1.3841	1.2196	0.7458		
5.5	1.5680		1.5071	1.3138	1.3338	1.1821	0.9058		
6.0	1.5465		1.4701	1.3144	1.2859	1.1236	1.0675		
6.5	1.5384		1.4708	1.3087	1.2346	1.1483	1.1583		
7.0	1.5057		1.4967	1.3241	1.1938	1.1113	1.2183		
7.5	1.4634		1.4678	1.4189	1.2153	1.1612	1.3143		
8.0	1.4215		1.4350	1.3796	1.3949	1.6365	1.7570		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	0.2753*								
3.875	0.2506*								
4.125	0.1902								
4.375	0.2289	0.2136							
4.625	0.2518								
4.875	0.3037								
5.125	0.9920								
5.375	1.0906								
5.625	1.1443	0.1817							
5.875	1.1793				0.3845				
6.125									
6.375	1.2708				0.4992	0.4253			
6.625	1.2502				0.4988	0.5079			
6.875	1.2577				0.5281	0.5431	0.5565		
7.125	1.2597				0.4800	0.5823	0.5455, 0.5269		
7.375	1.3092				0.4349	0.5483	0.5396		
					0.4777	0.5566	0.5773	0.5978	

WTR1421
RUN 66

TUNNEL	T2 PRESSURE TEST
PSI CONFIGURATION	PSI#1(PR/10) PSI

ALPH	14.96 deg	PHI	88.98 deg	P0	14.77 psia	T0	119.04 degf	MACH	2.0
				AVERAGED DATA					
				SCALE FACTOR: . 1.0000					

10
1.0000

14.77 psia
SCALE FACTOR

88.98 deg
AVERAGED DATA

PHI

ALPH 14.96 deg

BODY PRESSURES (PSI)

z/d	theta:	89.0	104.0	119.0	134.0	149.0	164.0
0.5		1.9952					
1.0		1.7890					
1.5		1.6025	1.5740	1.5061	1.3334	1.2795	1.4281, 1.4933
2.0		1.4991					1.1152, 1.1134
2.5		1.4805	1.3915	1.2914	0.9850	0.7598	0.9162
3.0		1.3701					
3.5		1.6017	1.3997	1.1960	0.9902	0.6049	0.6316
4.0		1.6511	1.3981	1.0392	0.9302	0.8531	0.1964
4.3		1.6261	1.3295	1.0240	0.8929	0.8115	0.2174
4.5		1.5925	1.2594	0.9190	0.8424	0.7168	0.2380
4.8		1.5883	1.2664	0.9307	0.8557	0.6410	0.1622
5.0		1.5272	1.3273	0.9198	0.8798	0.5721	0.2905
5.5		1.5384	1.4490	0.8991	0.7919	0.5476	0.3974
6.0		1.4966	1.4322	0.9885	0.7099	0.4177	0.4324
6.5		1.4315	1.3739	1.1116	0.6703	0.4190	0.4811
7.0		1.3724	1.3446	1.1488	0.6937	0.4769	0.5855
7.5		1.3017	1.2787	1.1724	0.7491	0.7271	0.7493
8.0		1.2350	1.2543	1.0839	1.1073	1.3827	1.3107

WING PRESSURES (PSI)

z/d	$r/d:$	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.1226*							
3.875	0.0959†							
4.125		0.0953						
4.375	0.1344†	0.1199						
4.625		0.2165	0.1718					
4.875		0.2609	0.2054					
5.125		0.5303	0.5529	0.2694				
5.375		0.5146	0.4529	0.3299				
5.625	0.4795, 0.5357		0.5624	0.2888	0.3418			
5.875	0.4724		0.6324	0.3150				
6.125			0.6946	0.3882	0.3747	0.3583		
6.375		0.5269	0.7753	0.4499	0.3423	0.4115		
6.625		0.4697	0.8008	0.5234	0.3564	0.4120	0.4033	
6.875		0.4907	0.7825	0.5821	0.3455	0.4213	0.4268, 0.3967	
7.125		0.6375	0.8400	0.6310	0.3769	0.3713	0.4266	
7.375		0.7424	0.7566	0.7426	0.4744	0.4228	0.5273	0.5039

WIR 1421
RUN 67

WTR1421
RUN 67

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSIN1(PR/10) PSIN2(TC/1)

ALPH	-0.08 deg	PHI	110.98 deg	P0	14.77 psia	T0	119.32 degf	MACII	2.0
				AVERAGED DATA		SCALE FACTOR:		1.0000	

BODY PRESSURES (PSI)

z/d	theta:	111.0	126.0	141.0	156.0	171.0	186.0
0.5	2.9997						
1.0	2.5600						
1.5	2.1698						
2.0	1.8892						
2.5	1.7583						
3.0	1.5426						
3.5	1.6483						
4.0	1.7055						
4.3	1.7105						
4.5	1.7127						
4.8	1.7337						
5.0	1.7519						
5.5	1.7760						
6.0	1.8087						
6.5	1.8324						
7.0	1.8458						
7.5	1.8272						
8.0	1.8094						

WING PRESSURES (PSI)

z/λ	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.6673*							
3.875	1.6633†							
4.125	1.6925							
4.375	1.7312†	1.6964						
4.625	1.7262		1.7355					
4.875	1.6697		1.7250					
5.125	1.7230		1.7261	1.6710				
5.375	1.7308		1.7535	1.7429				
5.625	1.7507, 0.7740		0.7637	0.7583	0.6576			
5.875	1.7453		1.7578	1.7494				
6.125			1.7664	1.7796	1.8001	1.5510		
6.375	1.8216		1.8249	1.8105	1.8037	1.6434		
6.625	1.7946		1.8213	1.8251	1.8486	1.7530	1.6104	
6.875	1.8057		1.8005	1.8365	1.8225	1.8361	1.6240, 1.7029	..
7.125	1.8050		1.8209	1.8120	1.8180	1.8113	1.6625	
7.375	1.8070		1.8084	1.8368	1.8320	1.8205	1.6999	1.5385

WHITE OAK LABORATORY

WTR1421
RUN 68

ALPH 4.93 deg PHI 112.21 deg
AVERAGED DATA

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

PO 14.78 psia
SCALE FACTOR: 1.0000

10 119.66 degF

MACH 2.0

theta: 112.2

z/d	127.2	142.2	157.2	172.2	187.2
0.5	2.5803				
1.0	2.2119				
1.5	1.8989				
2.0	1.6952	1.9870	2.0329	2.0933	2.1838, 2.0208
2.5	1.6172	1.5552	1.5627	1.5609	1.8326, 1.6621
3.0	1.4473				1.6544
3.5	1.5996	1.4890	1.4557	1.4505	1.3819
4.0	1.6811	1.5331	1.4733	1.4190	1.4007
4.3	1.6734	1.5766	1.4587	1.4239	1.3710
4.5	1.6372	1.5344	1.4603	1.4607	1.4331
4.8	1.6291	1.6034	1.5104	1.4761	1.3908
5.0	1.6176	1.6022	1.5777	1.4715	1.4749
5.5	1.6269	1.5574	1.5678	1.5402	1.5169
6.0	1.6270	1.5828	1.5746	1.5526	1.5386
6.5	1.6440	1.5901	1.5781	1.5690	1.5871
7.0	1.6466	1.6319	1.5689	1.5394	1.5529
7.5	1.6149	1.6178	1.6548	1.6111	1.6108
8.0	1.5955	1.6050	1.6240	1.6329	1.5935
				1.7224	1.8709

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.8796+							
3.875	0.8644+							
4.125	0.6762							
4.375	0.7010	0.6928						
4.625	0.6479							
4.875	0.7523							
5.125	1.4377							
5.375	1.4604	0.7583						
5.625	1.5368, 0.5345	0.7882						
5.875	1.5207	0.7200	0.8173					
6.125		1.4156	0.6525					
6.375	1.6053	1.4914	0.7315	0.8740	0.8854			
6.625	1.5800	1.5822	0.9584	0.8090	0.9054			
6.875	1.5893	1.5892	1.2122	0.7971	0.8890	0.9927		
7.125	1.5921	1.5775	1.3684	0.6865	0.9237	0.9876, 1.0072		
7.375	1.5925	1.6062	1.4600	0.7526	0.8661	0.8874		
		1.6044	1.5421	0.9188	0.8245	0.9104	0.9976	

WIR1421
RUN 69

ALPII 9.94 deg PHI 111.8

PSI CONFIGURATION PSI#1(PR/IO) PSI#2(IC/I)

TUNNEL T2 PRESSURE TEST

111.83 deg 14.77 psia TO 120.15 degF

AVERAGED DATA SCALE FACTOR: 1.0000

MACII 2.0

WIR1421
RUN 69

ALPII 9.94 deg PHI 111.8

PSI CONFIGURATION PSI#1(PR/IO) PSI#2(IC/I)

TUNNEL T2 PRESSURE TEST

111.83 deg 14.77 psia TO 120.15 degF

AVERAGED DATA SCALE FACTOR: 1.0000

MACII 2.0

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.3283*							
3.875	0.3047*							
4.125	0.2729							
4.375	0.29121							
4.625	0.3031							
4.875	0.2949							
5.125	0.6742							
5.375	0.7770							
5.625	1.2572, 0.9306							
5.875	1.0305							
6.125								
6.375	1.2028							
6.625	1.2076							
6.875	1.2267							
7.125	1.2410							
7.375	1.2740							

WHITE OAK LABORATORY

WTR1421
RUN 70

ALPHI 14.97 deg PHI 112.46 deg P0 14.79 psia TO 119.80 degF MACH 2.0

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)

PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)

SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta	127.5	142.5	157.5	172.5	187.5
0.5	112.5					
1.0	1.9636					
1.5	1.7019					
2.0	1.4951					
2.5	1.4248					
3.0	1.3821					
3.5	1.2620					
4.0	1.3433					
4.5	1.3080					
5.0	1.2753					
5.5	1.2113					
6.0	1.1656					
6.5	1.1164					
7.0	1.1091					
7.5	1.0872					
8.0	1.0966					
	1.0700					
	1.0205					
	0.9538					
		1.2298	0.7801	0.6498	0.6656	0.9483
		1.5728	0.8397	0.8290	0.7508	0.7636
		0.7975	0.9239	0.9231	0.8683	0.6082
		0.6507	0.9063	1.0129	0.9073	0.4824
		0.6808	1.0180	1.0987	0.8611	0.3337
		0.8050	1.0349	1.1558	0.8634	0.3021
		0.9543	1.0035	1.0794	0.8547	0.3189
		1.0343	1.0636	1.0333	0.7525	0.4142
		1.0809	1.0820	0.9983	0.6898	0.4581
		1.1187	1.0558	0.9288	0.5731	0.5083
		1.0780	1.1089	0.9030	0.6175	0.7459
		0.9809	1.0182	1.0438	1.3738	1.2615

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.2277*							
3.875	0.2025+							
4.125	0.1262							
4.375	0.1331							
4.625	0.1458							
4.875	0.1494							
5.125	0.3385							
5.375	0.4363							
5.625	0.7320							
5.875	0.5712							
6.125	0.5892							
6.375	0.6216							
6.625	0.5793							
6.875	0.5770							
7.125	0.5692							
7.375	0.6999							
		0.1702						
		0.1346						
		0.3638						
		0.1597						
		0.2106						
		0.2493						
		0.3172						
		0.4035						
		0.4583						
		0.4618						
		0.5041						
		0.6288						
			0.1991					
			0.2465					
			0.2438					
			0.2864					
			0.2765					
			0.2742					
			0.3618					
				0.2351				
				0.2757				
				0.2530				
				0.2813				
				0.2605				
				0.3609				
					0.3358			
					0.3409			
					0.2621			
					0.3602			
							0.3685	

WHITE OAK LABORATORY									
WIR1421 RUN 71		TUNNEL T2 PRESSURE TEST							
		PSI CONFIGURATION PSI#1(PR/IO) PSI#2(IC/I)							
ALPH	-0.08 deg	PHI	134.39 deg	P0	14.77 psia	T0	120.47 degF	MACH	2.0
		AVERAGED DATA							
		SCALE FACTOR: 1.0000							
		BODY PRESSURES (PSI)							
z/d	theta:	134.4	149.4	164.4	179.4	194.4	209.4		
0.5	3.0004								
1.0	2.5624								
1.5	2.1710								
2.0	1.8899								
2.5	1.7560								
3.0	1.5328								
3.5	1.6496								
4.0	1.7031								
4.3	1.7069								
4.5	1.7135								
4.8	1.7346								
5.0	1.7525								
5.5	1.7783								
6.0	1.8108								
6.5	1.8374								
7.0	1.8498								
7.5	1.8257								
8.0	1.8095								

WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	1.6641*								
3.875	1.6607+								
4.125	1.6812								
4.375	1.7314								
4.625	1.7265								
4.875	1.6436								
5.125	1.7286								
5.375	1.7307								
5.625	1.7514, 0.7718								
5.875	1.7407								
6.125									
6.375	1.8191								
6.625	1.7918								
6.875	1.8109								
7.125	1.8067								
7.375	1.8154								

WTR1421
RUN 72

2.0

PHH

PO 14.78 psia
SCALE FACTOR

20.68 degF

2.0

BODY PRESSURES (PSI)

149.0	164.0	179.0	194.0	209.0
2.0034	2.0732	2.1509	2.2378	2.3429
1.5749	1.5664	1.6082	1.6601	1.7705
1.5202	1.4619	1.4664	1.4988	1.4804
1.5533	1.4963	1.4837	1.4846	1.5065
1.5744	1.5356	1.4582	1.4768	1.4727
1.5644	1.4958	1.4468	1.5049	1.5321
1.5692	1.5755	1.4970	1.5117	1.4812
1.6170	1.5843	1.5713	1.4995	1.5567
1.6231	1.5603	1.5789	1.5768	1.5746
1.5977	1.5977	1.5924	1.5939	1.5959
1.6014	1.5901	1.5860	1.6276	1.6290
1.6495	1.5816	1.5617	1.5993	1.6708
1.6436	1.6860	1.6006	1.6644	1.6609
1.6226	1.6352	1.6437	1.7194	1.8965

WING PRESSURES (PSI)

z/d	r/d:	0.5935
3.625	1.1712*	
3.875	1.1604†	
4.125		0.8091
4.375	0.8281†	0.8245
4.625		0.7661
4.875		0.8891
5.125		1.5260
5.375		1.5343
5.625	1.6154, 0.5913	
5.875		1.5684
6.125		
6.375		1.6539
6.625		1.6303
6.875		1.6513
7.125		1.6546
7.375		1.6555

0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
0.8505					
0.7581					
1.5324	0.8944				
1.2381	0.9015				
0.4586	0.7744	0.9521			
1.5635	0.7147				
1.5873	0.8576	0.9689	0.9791		
1.6713	1.0857	0.8418	1.0295		
1.6701	1.3601	0.8123	1.0068	1.0567	
1.6629	1.5309	0.7684	0.9976	1.0578, 1.1834	
1.6862	1.6271	0.8628	0.8738	1.0121	
1.6752	1.6920	1.0173	0.7944	1.0157	1.0554

WHITE OAK LABORATORY

WTR1421
RUN 73

ALPH 9.99 deg

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSIN1(PR/IO) PSIN2(TC/1)

134.30 deg

PO 14.78 psia

SCALE FACTOR: 1.0000

MACII 2.0

WTR1421
RUN 73

theta: 134.3

z/d 0.5 2.2840

1.0 1.9425

1.5 1.6565

2.0 1.4924

2.5 1.3956

3.0 1.2834

3.5 1.4219

4.0 1.5016

4.3 1.4867

4.5 1.4489

4.8 1.4464

5.0 1.4333

5.5 1.4074

6.0 1.4045

6.5 1.4203

7.0 1.4261

7.5 1.3998

8.0 1.3833

149.3

164.3

179.3

194.3

209.3

1.7143

1.7888

1.9466

2.1528

2.4067, 1.7417

1.9949, 1.4582

1.7580

1.3015

1.2692

1.3608

1.5087

1.2370

1.0667

1.0989

1.2420

1.3410

1.5396

1.0477

1.0483

1.3599

1.3661

1.1038

1.0120

1.2088

1.3019

1.3411

1.1322

0.9946

1.2263

1.3184

1.3507

1.2627

1.0455

1.2317

1.2301

1.4078

1.3159

1.1607

1.2127

1.2549

1.4195

1.3325

1.3132

1.3213

1.2151

1.3954

1.3687

1.3806

1.4015

1.3805

1.3962

1.4425

1.2210

1.4107

1.3399

1.3712

1.3976

1.3025

1.3961

1.4379

1.4159

1.4750

1.3439

1.3869

1.4020

1.5669

1.8258

WING PRESSURES (PSI)

z/d 3.625 0.5462*

3.875 0.5260*

4.125 0.5231

4.375 0.53321 0.5423

4.625 0.5302

4.875 0.5944

5.125 0.9282

5.375 0.9500

5.625 1.4822, 0.0038

5.875 1.0206

6.125 0.4522

6.375 1.1785

6.625 1.2337

6.875 1.2836

7.125 1.3295

7.375 1.3560

0.7185

0.8435

0.9685

1.0935

1.2185

1.3435

0.5617

0.5210

0.9442

0.5052

0.4601

0.4140

0.4572

0.5347

0.5366

0.5327

0.5186

0.4397

0.4289

0.6013

0.5781

0.5410

0.6713

0.5997

0.5873

0.6325

0.6102

0.5881

0.5819

0.6411

0.7134

0.6804

0.6397

0.5888

0.5981

0.6833

0.7033, 0.9342

0.6933

0.6822

0.7018

WHITE OAK LABORATORY									
TUNNEL 12 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(1C/1)									
ALPH	14.97 deg	PHI	134.13 deg	P0	14.79 psia	10	121.05 degF	MACH	2.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	134.1	149.1	164.1	179.1	194.1	209.1		
0.5	1.9272								
1.0	1.6344								
1.5	1.3505								
2.0	1.2063		1.3243	1.4265	1.6914	2.0663	2.5034, 1.4612		
2.5	1.1450		0.8470	0.8832	1.1166	1.4005	2.0631, 1.2421		
3.0	1.0987						1.7923		
3.5	1.0902								
4.0	0.8550		0.7788	0.6040	0.7859	1.0677	1.3613		
4.3	0.8003		1.5233	0.7852	0.7481	1.0818	1.3793		
4.5	0.7308		0.8695	0.8636	0.7517	1.1307	1.2724		
4.8	0.7121		0.9079	0.9074	0.7593	1.1634	1.1547		
5.0	0.7558		0.9765	1.1312	0.8345	1.1929	0.9602		
5.5	0.9441		1.0153	1.1811	0.9780	1.1701	0.9022		
6.0	1.0684		1.1905	1.1299	1.1397	1.2179	0.7317		
6.5	1.1996		1.1141	1.1507	1.1754	1.1846	0.6590		
7.0	1.1958		1.0534	1.0967	1.1652	1.1759	0.6131		
7.5	1.2298		1.1423	1.0467	1.1286	1.0987	0.6605		
8.0	1.2075		1.1504	1.1632	1.1505	1.1409	0.8746		
			1.2279	1.2188	1.2392	1.5310	1.4578		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.4318*							
3.875	0.4098*							
4.125	0.3819							
4.375	0.3993							
4.625	0.3912							
4.875	0.4167							
5.125	0.6488							
5.375	0.6736							
5.625	1.4779, 0.7029							
5.875	0.6829							
6.125								
6.375	0.7849							
6.625	0.7529							
6.875	0.7759							
7.125	0.7755							
7.375	0.8264							
		0.4306	0.4306	0.4245	0.4868	0.4399	0.4549	0.4344
		0.3812	0.3812	0.4123	0.3728	0.4342	0.4658, 0.6772	
		0.6695	0.3816	0.3743	0.3728	0.3740	0.4356	
		0.3559	0.2949	0.3728	0.3728	0.4342	0.4332	
		0.2689	0.2689	0.3709	0.3709	0.4399		
		0.3093	0.3093	0.3624	0.3740	0.4985		
		0.3335	0.3335	0.3690	0.4194	0.4585		
		0.3164	0.3164	0.3813	0.3769	0.4522		
		0.3476	0.3476	0.3300	0.3605	0.3795		
		0.4276	0.4276	0.3743	0.4116	0.3655		

WHITE OAK LABORATORY

WTR1421
RUN 75TUNNEL 12 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)WTR1421
RUN 75WTR1421
RUN 75ALPH -0.09 deg PHI 157.40 deg PO 14.77 psia TO 120.91 degF MACH 2.0
AVERAGED DATA SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	172.4	187.4	202.4	217.4	232.4
0.5	2.9992					
1.0	2.5612					
1.5	2.1702	2.2201	2.2373	2.2451	2.2440	2.2411, 2.2507
2.0	1.8906	1.7351	1.7351	1.7357	1.7184	1.9027, 1.8474
2.5	1.7546					1.7382
3.0	1.5480					
3.5	1.6461	1.6298	1.6073	1.6042	1.6185	1.6308
4.0	1.7021	1.5120	1.6737	1.6887	1.6869	1.7185
4.3	1.7045	1.6974	1.7191	1.6791	1.7246	1.6923
4.5	1.7095	1.6934	1.7007	1.6919	1.7277	1.7594
4.8	1.7316	1.7191	1.7659	1.7272	1.7501	1.7049
5.0	1.7514	1.7817	1.7815	1.7989	1.7406	1.7834
5.5	1.7803	1.7942	1.7520	1.7860	1.7824	1.7789
6.0	1.8110	1.7890	1.7965	1.7982	1.7854	1.7670
6.5	1.8390	1.7988	1.7967	1.7939	1.8145	1.8006
7.0	1.8535	1.8497	1.7909	1.7609	1.7809	1.8408
7.5	1.8334	1.8567	1.9030	1.7993	1.8371	1.8173
8.0	1.8100	1.8132	1.8266	1.8298	1.7789	1.8980

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.6582+							
3.875	1.6544+							
4.125	1.6743							
4.375	1.72151	1.6779						
4.625	1.7211	1.7259						
4.875	1.6357	1.7197						
5.125	1.7266	1.7295	1.6369					
5.375	1.7353	1.7581	1.7422					
5.625	1.7498, 0.7708	0.7615	0.7607	0.6138				
5.875	1.7355	1.7487	1.7422					
6.125		1.7613	1.7784	1.7943	1.5183			
6.375	1.8166	1.8173	1.8032	1.7960	1.6003			
6.625	1.7896	1.8176	1.8236	1.8424	1.7008			
6.875	1.8119	1.8056	1.8387	1.8219	1.8130	1.5852		
7.125	1.8088	1.8224	1.8164	1.8317	1.8129	1.5946, 1.6850		
7.375	1.8151	1.8171	1.8410	1.8351	1.8245	1.6320	1.6809	1.5251

THE UNIVERSITY OF CHICAGO

1000

[illegible]

5/ MRB
12/11/11

Altitude	4000 feet	10000 feet	14000 feet	100000 feet	MACH
Altitude	4000	10000	14000	100000	20

MACT 20

100 121 A5 1001

11

14 1/2 10512

1-1

(150) 514055 1801 4008

22/d	theta	15.7 3	17.2 3	18.7 3	20.2 3	21.7 3	23.2 3
0 5	2 7692						
1 0	2 3489						
1 5	1 9849						
2 0	1 7383	2 0987		2 2001	2 3025	2 3963	2 4832, 1 9889
2 5	1 6011	1 6012		1 6475	1 7190	1 7841	2 0883, 1 6597
3 0	1 4268						1 8854
3 5	1 5267						
4 0	1 5807	1 5078		1 4859	1 5236	1 5836	1 6130
4 3	1 5896	1 5041		1 5218	1 5521	1 5827	1 6477
4 5	1 5807	1 5474		1 5586	1 5327	1 5881	1 6060
4 8	1 5901	1 5325		1 5141	1 5226	1 6132	1 6686
5 0	1 5940	1 5520		1 5903	1 5634	1 6155	1 6053
5 5	1 6391	1 6075		1 5982	1 6256	1 5986	1 6840
6 0	1 6559	1 6319		1 5784	1 6225	1 6469	1 6845
6 5	1 6858	1 6115		1 6091	1 6320	1 6558	1 6765
7 0	1 6967	1 6755		1 6172	1 6323	1 6916	1 7086
7 5	1 6743	1 6774		1 6112	1 6077	1 6599	1 7512
8 0	1 6484	1 6564		1 7234	1 6435	1 7284	1 7415
				1 6570	1 6647	1 7345	1 9120

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.5865*							
3.875	1.5817†							
4.125	1.0397							
4.375	1.0452†							
4.625	1.1942		1.0633					
4.875	1.0571		1.1897					
5.125	1.6418		1.6462	1.0613				
5.375	1.6554		1.7003	1.0501				
5.625	1.6994		0.7334	0.0619	0.1330			
5.875	1.6483		1.6985	1.1483				
6.125			1.7011	1.4625	1.0829	1.1437		
6.375	1.7330		1.7489	1.7008	1.0373	1.1999		
6.625	1.7065		1.7446	1.8012	1.1202	1.1458	1.1853	
6.875	1.7327		1.7343	1.8251	1.2146	1.1085	1.1923, 1.3469	
7.125	1.7299		1.7514	1.7902	1.3985	1.0555	1.1457	
7.375	1.7350		1.7424	1.8027	1.6277	1.0689	1.0891	1.1750

WIR1421	TUNNEL T2 PRESSURE TEST				WIR1421			
RUN 77	PSI CONFIGURATION PSI#1(PR/TO) PSI#2(TC/I)				RUN 77			
ALPH	9.98 deg	PHI	156.43 deg	P0	14.78 psia	121.65 degF	.MACH	2.0
		AVERAGED DATA		SCALE FACTOR:		1.0000		

z/d	theta:	171.4	186.4	201.4	216.4	231.4
0.5	156.4					
1.0	2.4515					
1.5	2.0394					
2.0	1.7017					
2.5	1.4693	1.8587	2.0535	2.2937	2.5339	2.7659, 1.7957
3.0	1.3153	1.3350	1.4391	1.6292	1.8293	2.3057, 1.5385
3.5	1.1453					2.0662
4.0	1.1969	1.1283	1.1896	1.3430	1.5300	1.6584
4.3	1.2588	1.4886	1.1387	1.3022	1.4857	1.6717
4.5	1.2779	1.0728	1.1408	1.2615	1.4797	1.6256
4.8	1.2860	1.0414	1.0722	1.2345	1.5010	1.6617
5.0	1.3153	1.0597	1.1162	1.2606	1.4895	1.5943
5.5	1.3252	1.1443	1.1170	1.3174	1.4583	1.6657
6.0	1.3795	1.2390	1.1061	1.3056	1.5115	1.6522
6.5	1.3951	1.2645	1.1914	1.3153	1.5175	1.6160
7.0	1.4405	1.2847	1.2787	1.3419	1.5475	1.6331
7.5	1.4679	1.3530	1.2909	1.3809	1.5258	1.6623
8.0	1.4580	1.3678	1.4161	1.4461	1.6358	1.6642
	1.4359	1.4396	1.3764	1.3921	1.7190	1.9517

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.2961*							
3.875	1.2873†							
4.125	0.9205							
4.375	0.9278†	0.9342						
4.625	0.8542	0.9483						
4.875	0.9765	0.8469						
5.125	1.6114	1.6161						
5.375	1.6005	0.9002	0.9815					
5.625	1.6650	0.6461	0.1009	0.8965	0.0255			
5.875	1.6025	1.1184	0.8368	0.8368				
6.125		1.2468	0.7887	0.7887	1.0266	0.9938		
6.375	1.6600	1.3767	0.7602	0.7602	0.9647	1.0616		
6.625	1.6310	1.4398	0.7854	0.7854	0.9568	1.0375	1.0094	
6.875	1.6444	1.4550	0.8278	0.8278	0.8478	1.0166	1.0168, 1.1058	
7.125	1.6384	1.5079	0.8472	0.8041	0.8041	0.9557	0.9974	
7.375	1.6528	1.5588	0.8968	0.8241	0.8241	0.9187	0.9785	0.9831

WTR1421
RUN 78

TUNNEL 12 PRESSURE TEST
PSI CONFIGURATION PS#1(PR/10) PS#2(TC/1)

ALPH	14.96 deg	PIII	156.71 deg	P0	14.79 psia	T0	121.72 degF	MACH	2.0
				AVERAGED DATA				SCALE FACTOR: 1.0000	

BODY PRESSURES (PSI)

theta:	z/d	156.7	171.7	186.7	201.7	216.7	231.7
	0.5	2.0616					
	1.0	1.6555					
	1.5	1.3253	1.5477	1.8837	2.2937	2.7111	3.1102, 1.6577
	2.0	1.0355					2.6086, 1.4254
	2.5	0.8959	1.0036	1.2490	1.5787	1.9267	2.3211
	3.0	0.6476					
	3.5	0.7220	0.7107	0.9541	1.2447	1.5742	1.8411
	4.0	0.8525	1.4743	0.8750	1.1966	1.5360	1.8567
	4.5	0.8840	0.8614	0.8826	1.1580	1.5567	1.7896
	4.3	0.8852	0.8760	0.8175	1.1349	1.5485	1.8259
	4.8	0.9266	0.9385	0.8706	1.1608	1.5734	1.7357
	5.0	1.0136	1.0817	0.8595	1.2360	1.5378	1.7929
	5.5	1.1875	1.0366	0.8540	1.2445	1.6165	1.7494
	6.0	1.1292	0.9532	0.9003	1.2644	1.6316	1.6851
	6.5	1.0446	0.9258	0.9213	1.2934	1.6761	1.6640
	7.0	1.1059	0.9178	0.9030	1.2824	1.6259	1.6414
	7.5	1.2332	0.9564	1.0314	1.3463	1.7079	1.5833
	8.0	1.2161	1.2363	1.0126	1.0387	1.8946	2.1006

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.0791*							
3.875	1.0670*							
4.125	0.9548							
4.375	0.9606†	0.9683						
4.625	0.9527							
4.875	1.0304		0.9808					
5.125	1.4422		1.4496	1.0350				
5.375	1.4426		0.8232	1.0332				
5.625	1.6701	0.4769	0.7371	0.9881	0.0461			
5.875	1.4729		0.6802	0.9627				
6.125			0.6836	0.9474	1.0623	1.0044		
6.375	1.4959		0.7744	0.9110	0.9981	1.0543		
6.625	1.4756		0.8129	0.8531	1.0324	1.0320	1.0135	
6.875	1.4819		0.7838	0.8298	0.9962	1.0408	1.0199, 0.8957	
7.125	1.4664		0.8030	0.7629	0.9693	0.9769	0.9942	
7.375	1.4484		0.8599	0.7405	0.9459	0.9490	0.9774	0.9847

WTR1421
RUN 79

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)

ALPHI	-0.09 deg	PHI	179.62 deg	P0	14.77 psia	T0	121.99 degF	MACH	2.0
					SCALE FACTOR:		1.0000		
AVERAGED DATA									

BODY PRESSURES (PSI)

theta:	z/d	179.6	194.6	209.6	224.6	239.6	254.6
0.5	1.0	3.0017					
1.0	1.0	2.5629					
1.5	1.5	2.1669					
2.0	2.0	1.8930	2.2214	2.2456	2.2557	2.2484	2.2455, 2.2484
2.5	2.5	1.7553	1.7390	1.7377	1.7360	1.7233	1.9031, 1.8426
3.0	3.0	1.5362					1.7429
3.5	3.5	1.6431	1.6262	1.6018	1.5997	1.6171	1.6293
4.0	4.0	1.7014	1.4657	1.6696	1.6865	1.6886	1.7268
4.3	4.3	1.7030	1.6964	1.7200	1.6776	1.7276	1.6945
4.5	4.5	1.7096	1.6929	1.7020	1.6948	1.7320	1.7650
4.8	4.8	1.7302	1.7206	1.7724	1.7324	1.7609	1.7075
5.0	5.0	1.7538	1.7871	1.7890	1.8074	1.7432	1.7828
5.5	5.5	1.8277	1.7968	1.7523	1.7871	1.7832	1.7817
6.0	6.0	1.8162	1.7896	1.7958	1.7989	1.7881	1.7725
6.5	6.5	1.8429	1.8000	1.8014	1.7930	1.8171	1.8033
7.0	7.0	1.8623	1.7948	1.7948	1.7620	1.7802	1.8406
7.5	7.5	1.8483	1.8681	1.9089	1.7944	1.8429	1.8202
8.0	8.0	1.8121	1.8150	1.8313	1.8345	1.7830	1.9008

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.6557*							
3.875	1.6517*							
4.125	1.6718							
4.375	1.71751	1.6754						
4.625	1.7213		1.7222					
4.875	1.6467		1.7200					
5.125	1.7266		1.7297	1.6479				
5.375	1.7353		1.7584	1.7449				
5.625	1.7505, 0.7745		0.7640	0.7593	0.6322			
5.875	1.7399		1.7542	1.7482				
6.125			1.7603	1.7777	1.8000	1.5347		
6.375	1.8194		1.8196	1.8018	1.7925	1.6174		
6.625	1.7897		1.8187	1.8208	1.8449	1.7104	1.5952	
6.875	1.8107		1.8033	1.8398	1.8207	1.8181	1.6106, 1.6793	
7.125	1.8077		1.8230	1.8156	1.8304	1.8073	1.6511	
7.375	1.8137		1.8162	1.8390	1.8357	1.8205	1.6925	1.5251

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)									
ALPH	4.93 deg	PHI	179.51 deg	P0	14.77 psia	T0	122.18 degF	MACH	2.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	179.5	194.5	209.5	224.5	239.5	254.5		
0.5		2.9554							
1.0		2.4990							
1.5		2.1019							
2.0		1.8176	2.2471	2.3635	2.4581	2.5321	2.5789, 2.0019		
2.5		1.6661	1.7031	1.7707	1.8433	1.8948	2.1842, 1.6667		
3.0		1.4479					1.9739		
3.5		1.5287	1.5407	1.5650	1.6180	1.6955			
4.0		1.5742	1.4573	1.5914	1.6650	1.7190	1.7416		
4.3		1.5768	1.5761	1.6319	1.6421	1.7347	1.8094		
4.5		1.5696	1.5670	1.6002	1.6412	1.7440	1.7537		
4.8		1.5855	1.5897	1.6672	1.6722	1.7552	1.8277		
5.0		1.5947	1.6441	1.6838	1.6722	1.7507	1.7507		
5.5		1.6668	1.6787	1.6586	1.7505	1.7280	1.8182		
6.0		1.6922	1.6567	1.6779	1.7258	1.7631	1.8059		
6.5		1.7292	1.6725	1.6888	1.7204	1.7595	1.7872		
7.0		1.7472	1.7344	1.6838	1.7190	1.7875	1.8132		
7.5		1.7273	1.7361	1.6820	1.6900	1.7489	1.8386		
8.0		1.6978	1.7045	1.8020	1.7306	1.8179	1.8323		
				1.7410	1.7467	1.7482	1.9376		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.7882*							
3.875	1.7862*							
4.125	1.7517							
4.375	1.79631							
4.625	1.7847							
4.875	1.6600							
5.125	1.7733							
5.375	1.7655							
5.625	1.7840, 0.7988							
5.875	1.7610				0.6186			
6.125								
6.375	1.8319				1.7543			
6.625	1.7980				1.7620			
6.875	1.8162				1.8179			
7.125	1.8137				1.7983			
7.375	1.8217				1.8122			
					1.8142			
						1.5415		
						1.6441		
						1.6975		
						1.7658		
						1.5324, 1.7230		
						1.6146		
						1.6528		
							1.4607	

WHITE OAK LABORATORY									
WTR1421 RUN 81		TUNNEL T2 PRESSURE TEST							
ALPHI 9.96 deg		PSI CONFIGURATION PSI#1(PR/IO) PSI#2(IC/I)							
PHII 179.51 deg		PO 14.77 psia		TO 122.26 degF		MACH 2.0			
AVERAGED DATA		SCALE FACTOR: 1.0000							
z/d		BODY PRESSURES (PSI)							
theta:									
179.5									
2.8065									
2.3277									
1.0									
1.5									
2.0									
2.5									
3.0									
3.5									
4.0									
4.3									
4.5									
4.8									
5.0									
5.5									
6.0									
6.5									
7.0									
7.5									
8.0									
1.5232									
1.4381									
1.3719									
1.1916									
1.1727									
1.2269									
1.0879									
1.1679									
1.2973									
1.4339									
1.5069									
1.5252									
1.5344									
1.4788									
1.4603									
1.3170									
1.3530									
1.3710									
1.3835									
1.4449									
1.4501									
1.4040									
1.2176									
1.2673									
1.4685									
1.4529									
1.4806									
2.4472									
2.6913									
2.4472									
1.7708									
1.5892									
2.1928									
194.5									
209.5									
224.5									
239.5									
254.5									
3.0254, 1.8082									
2.5414, 1.5510									
2.2934									
1.9656									
2.0031									
1.9394									
2.0005									
1.9155									
1.9790									
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1.7419									
1.7866									
1.7229									
1.7946									
1.8060									
1.8492									
1.8401									
1.8265									
1.8365									
1.8350									
1.8784									
1.7890									
1.8060									
1.7808									
1.7946									
1.7229									
1.7866									
1.9087									
2.0109									
1.7419									
1.7866									
1.7229									
1.7946									
1.8060									
1.8492									
1.8401									
1.8265									
1.8365									
1.8350									
1.8784									
1.7890									
1.8060									
1.7808									

WHITE OAK LABORATORY

WTR1421
RUN 82

ALPH 14.97 deg PHI 179.67 deg PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

TUNNEL T2 PRESSURE TEST

SCALE FACTOR: 1.0000

10 122.58 degF MACH 2.0

z/d theta: 179.7

0.5 2.5895

1.0 2.1020

1.5 1.7149

2.0 1.4203

2.5 1.1978

3.0 0.9420

3.5 0.9180

4.0 0.8604

4.3 0.8036

4.5 0.7379

4.8 0.7054

5.0 0.7162

5.5 0.9453

6.0 1.1987

6.5 1.3948

7.0 1.4938

7.5 1.4946

8.0 1.4517

194.7 209.7 224.7 239.7 254.7

2.1434 2.5626 2.9768 3.3357 3.5777, 1.6582

1.4668 1.8131 2.1791 2.4568 3.0219, 1.4295

1.1749 1.4769 1.8030 2.1120 2.3253

1.4351 1.4278 1.7855 2.0903 2.3461

1.0771 1.4433 1.7354 2.0676 2.2761

1.0225 1.3622 1.7139 2.0857 2.3141

0.9985 1.4225 1.7256 2.0680 2.2601

1.0393 1.3928 1.7787 2.0156 2.3105

1.0122 1.3234 1.7171 2.0273 2.2641

0.9527 1.3140 1.6856 2.0104 2.2212

0.9554 1.2918 1.6578 2.0104 2.2266

1.1312 1.2306 1.5880 1.9503 2.2356

1.2386 1.3258 1.6053 1.9983 2.2112

1.4647 1.2437 1.2638 2.0233 2.2783

WING PRESSURES (PSI)

z/d r/d: 0.5935

3.625 2.3533*

3.875 2.3594*

4.125 2.3124

4.375 2.33131 2.3069

4.625 2.2681

4.875 2.0580

5.125 2.2795

5.375 2.2535

5.625 1.7387, 0.2720

5.875 2.2170

6.125 2.2056

6.375 2.2394

6.625 2.2113

6.875 2.1793

7.125 2.1960

7.375 2.1871

0.7185 0.8435 0.9685 1.0935 1.2185 1.3435

2.3235 2.2705 2.2736 2.2489 0.2369 2.2088

2.0575 2.1755 0.1818 2.1583 2.1794 2.2056

2.0911 2.0703 2.1357 2.1357 2.1414 2.1600

2.1794 2.1841 2.1896 2.1883 2.1414 2.1341

2.0911 2.0703 2.1357 2.1357 2.1414 2.1341

1.9976 2.0394 2.1251 2.1470 2.1096 2.1106

1.7484 1.7776, 1.8642 1.8665 1.9158 1.5694

WIR1421
RUN 83

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH -0.09 deg PHI 202.14 deg P0 14.75 psia T0 122.69 degF MACII 2.0

SCALE FACTOR: 1.0000

WIR1421
RUN 83

theta: 202.1

z/d	202.1	217.1	232.1	247.1	262.1	277.1
0.5	3.0144					
1.0	2.5733					
1.5	2.1742					
2.0	1.9039	2.2370	2.2584	2.2643	2.2577	2.2571, 2.2489
2.5	1.7626	1.7418	1.7415	1.7421	1.7276	1.9117, 1.8394
3.0	1.5415					1.7487
3.5	1.6389	1.6201	1.6002	1.6012	1.6190	1.6311
4.0	1.6987	1.4272	1.6699	1.6891	1.6941	1.7351
4.3	1.7031	1.6966	1.7216	1.6803	1.7348	1.7028
4.5	1.7123	1.6963	1.7084	1.6994	1.7356	1.7694
4.8	1.7356	1.7264	1.7799	1.7376	1.7651	1.7152
5.0	1.7599	1.7949	1.7952	1.8133	1.7473	1.7913
5.5	1.7842	1.7986	1.7523	1.7916	1.7871	1.7890
6.0	1.8183	1.7904	1.7990	1.8063	1.7919	1.7795
6.5	1.8482	1.8023	1.8053	1.7995	1.8229	1.8080
7.0	1.8738	1.8692	1.7977	1.7610	1.7807	1.8450
7.5	1.8567	1.8697	1.9133	1.8019	1.8448	1.8229
8.0	1.8035	1.8073	1.8388	1.8413	1.7826	1.9005

BODY PRESSURES (PSI)

WING PRESSURES (PSI)

z/d	r/d: 0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.6601*						
3.875	1.6563*						
4.125	1.6864						
4.375	1.73571						
4.625	1.7291	1.7400					
4.875	1.6844	1.7281					
5.125	1.7316	1.7342	1.6857				
5.375	1.7412	1.7673	1.7647				
5.625	1.7534, 0.7802	0.7718	0.7675	0.6936			
5.875	1.7446	1.7580	1.7555				
6.125		1.7672	1.7831	1.8069	1.5903		
6.375	1.8249	1.8282	1.8085	1.8000	1.5814		
6.625	1.7921	1.8242	1.8268	1.8494	1.7637	1.6469	
6.875	1.8174	1.8084	1.8453	1.8228	1.8301	1.6639, 1.7220	
7.125	1.8093	1.8261	1.9194	1.8314	1.8046	1.7069	
7.375	1.8101	1.8201	1.8417	1.8384	1.8175	1.7324	1.5589.

WIR1421
RUN 84

WHITE OAK LABORATORY

TUNNEL 12 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/IO) PSI#2(IC/1)

ALPH 4.96 deg PHI 202.1 theta: 217.1 232.1 247.1 262.1 277.1

202.10 deg
AVERAGED DATA

PO 14.76 psia
SCALE FACTOR: 1.0000

TO 122.88 degf

MACII 2.0

WIR1421
RUN 84

z/d 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.3 4.5 4.8 5.0 5.5 6.0 6.5 7.0 7.5 8.0

theta: 202.1 3.1768 2.6897 2.2594 1.9497 1.7722 1.5206 1.5843 1.6102 1.6097 1.5995 1.6245 1.6453 1.7289 1.7608 1.8027 1.8251 1.8054 1.7780

217.1 232.1 247.1 262.1 277.1

2.4134 2.5207 1.8910 1.6175 1.4209 1.6495 1.6400 1.6648 1.7277 1.7708 1.7478 1.7655 1.8315 1.8379 1.7821

2.6221 2.6145, 2.0081 2.2161, 1.6618 2.0037 1.8300 1.9148 1.8812 1.9482 1.8776 1.9446 1.9187 1.8957 1.9096 1.9404 1.9282 1.9327

1.7729 1.8380 1.8607 1.8599 1.8889 1.8627 1.8825 1.8758 1.8971 1.8502 1.9219 1.8019

1.7161 1.7784 1.7636 1.7702 1.7969 1.8691 1.8570 1.8428 1.8333 1.7957 1.8380 1.8419

1.6555 1.6980 1.7413 1.7086 1.7722 1.7901 1.7791 1.7892 1.7914 1.9109 1.8392

WING PRESSURES (PSI)

z/d 3.625 3.875 4.125 4.375 4.625 4.875 5.125 5.375 5.625 5.875 6.125 6.375 6.625 6.875 7.125 7.375

r/d: 0.5935 1.8925* 1.8920* 1.9073 1.8997 1.9235 1.8941 1.8851 1.8601, 0.9162 1.8709 1.9419 1.9003 1.9216 1.9165 1.9284

0.7185 0.8435 0.9685 1.0935 1.2185 1.3435

1.9423 1.8994 1.8941 1.9159 0.9145 1.8923 1.8913 1.9465 1.9405 1.9176 1.9317 1.9239

1.9238 1.9462 0.9135 1.9158 1.9201 1.9290 1.9524 1.9695 1.9306 1.9508

0.9413 1.9598 1.9286 1.9731 1.9445 1.9473 1.9513

1.9120 1.9674 1.9537 1.9659 1.9655, 1.9539 1.9413 1.9298 1.9235 1.9127

WIR1421
RUN 85

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)

ALPH 9.97 deg PHI 202.07 deg PO 14.76 psia TO 123.05 degF MACH 2.0

AVERAGED DATA SCALE FACTOR: 1.0000

WTR1421
RUN 85

BODY PRESSURES (PSI)

z/d	theta:	202.1	217.1	232.1	247.1	262.1	277.1
0.5	3.2945						
1.0	2.7546						
1.5	2.2929		2.6000	2.8460	3.0128	3.1029	3.0933, 1.7690
2.0	1.9502						2.6073, 1.4842
2.5	1.7277		1.9158	2.0885	2.2456	2.3072	2.3538
3.0	1.4139						
3.5	1.4595		1.6202	1.7777	1.9084	2.0503	2.1497
4.0	1.4277		1.4146	1.7871	1.9792	2.1109	2.2517
4.3	1.4027		1.5897	1.8165	1.9471	2.1092	2.1818
4.5	1.3670		1.5564	1.7616	1.9329	2.1095	2.2530
4.8	1.3466		1.5584	1.8350	1.9717	2.1418	2.1726
5.0	1.3457		1.6079	1.8351	2.0477	2.0981	2.2356
5.5	1.3459		1.5855	1.7533	1.9712	2.0582	2.1925
6.0	1.3104		1.5038	1.7336	1.9359	2.0646	2.1437
6.5	1.3607		1.4727	1.7046	1.8924	2.0659	2.1410
7.0	1.5844		1.5011	1.6459	1.8156	1.9863	2.1426
7.5	1.6268		1.5934	1.7374	1.8288	2.0371	2.1179
8.0	1.6234		1.6319	1.6909	1.6980	1.7639	1.9455

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	2.2404*							
3.875	2.2451*							
4.125	2.2561							
4.375	2.28181							
4.625	2.2140		2.2752					
4.875	2.2674		2.2166					
5.125	2.1944		2.1899					
5.375	2.1739		2.2106					
5.625	1.9156, 0.1998		0.1993					
5.875	2.1434		2.1743		0.2771			
6.125			2.1589		2.2599			
6.375	2.1936		2.1979		2.2128			
6.625	2.1410		2.1775		2.2395			
6.875	2.1542		2.1518		2.1942		2.3082	
7.125	2.1381		2.1522		2.1892		2.2872, 2.0250	
7.375	2.1281		2.1314		2.1765		2.2345	
					2.1634		2.1876	2.2268

WHITE OAK LABORATORY									
TUNNEL 12 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)									
ALPH	14.96 deg	PHI	202.12 deg AVERAGED DATA	P0	14.77 psia SCALE FACTOR:	T0	123.01 degf	MACH	2.0
BODY PRESSURES (PSI)									
z/d	theta:	202.1	217.1	232.1	247.1	262.1	277.1		
0.5		3.3930							
1.0		2.8224							
1.5		2.3433							
2.0		1.9810	2.8274	3.2338	3.5322	3.6971	3.6718, 1.4958		
2.5		1.7150	2.0652	2.3797	2.6435	2.7521	3.1088, 1.2607		
3.0		1.3944					2.8013		
3.5		1.4124	1.7165	2.0044	2.2330	2.4475	2.5892		
4.0		1.3616	1.4078	2.0110	2.3097	2.5112	2.7379		
4.3		1.3297	1.6601	2.0185	2.2648	2.4937	2.6318		
4.5		1.2757	1.6330	1.9715	2.2643	2.5568	2.6951		
4.8		1.2478	1.6316	2.0477	2.2985	2.5282	2.6000		
5.0		1.2446	1.6442	2.0218	2.3369	2.4787	2.6721		
5.5		1.2261	1.6133	1.9183	2.2557	2.4712	2.6012		
6.0		1.1815	1.5246	1.8899	2.2111	2.4254	2.5524		
6.5		1.1771	1.4791	1.8549	2.1645	2.4251	2.5496		
7.0		1.1932	1.4891	1.7833	2.0808	2.3387	2.5609		
7.5		1.2038	1.4535	1.8650	2.0809	2.3827	2.5333		
8.0		1.2351	1.2544	1.7349	1.7408	1.9506	2.2198		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	2.7156*								
3.875	2.7267*								
4.125	2.7505								
4.375	2.77281	2.7387							
4.625	2.6751								
4.875	2.7504								
5.125	2.6348								
5.375	2.6009								
5.625	1.6792, 0.6277								
5.875	2.5672				0.7526				
6.125									
6.375	2.6125					2.7105			
6.625	2.5524					2.7468			
6.875	2.5693					2.6948			
7.125	2.5522					2.6674	2.7800		
7.375	2.5423					2.6024	2.7477, 2.1223		
						2.5979	2.6768		
						2.5822	2.6145		
								2.6855	

WIR1421 RUN 87		WHITE DAK LABORATORY		WTR1421 RUN 87	
		TUNNEL T2 PRESSURE TEST			
		PSI CONFIGURATION		PSI#2(TC/1)	
ALPH	-0.11 deg	PIII	224.46 deg AVERAGED DATA	PO	14.75 psia
					SCALE FACTOR: 1.0000
				TO	123.31 degF
					MACH 2.0

z/d	θ	BODY PRESSURES (PSI)				
		239.5	254.5	269.5	284.5	299.5
0.5	224.5					
	3.0324					
1.0	2.5850					
1.5	2.1900					
2.0	1.9159	2.2465	2.2715	2.2807	2.2705	2.2615, 2.2534
2.5	1.7661	1.7481	1.7484			1.9149, 1.8397
3.0	1.5332			1.7492	1.7321	1.7531
3.5	1.6374	1.6206	1.6026			
4.0	1.6985	1.3980	1.6739	1.5994	1.6238	1.6421
4.3	1.7040	1.6991	1.7272	1.6963	1.6978	1.7335
4.5	1.7170	1.6992	1.7104	1.6845	1.7374	1.7092
4.8	1.7412	1.7306	1.7836	1.7020	1.7413	1.7762
5.0	1.7654	1.7995	1.7991	1.7404	1.7705	1.7202
5.5	1.7863	1.8013	1.7564	1.8186	1.7519	1.8028
6.0	1.8220	1.7957	1.8063	1.7986	1.7988	1.8013
6.5	1.8552	1.8082	1.8125	1.8133	1.8021	1.7874
7.0	1.8845	1.8783	1.8034	1.8041	1.8307	1.8168
7.5	1.8606	1.8833	1.9252	1.7660	1.7866	1.8529
8.0	1.8170	1.8201	1.8465	1.8073	1.8512	1.8254
				1.8490	1.7552	1.9014

z/d	r/d	0.5935	0.7185	0.8435	0.9885	1.0935	1.2185	1.3435
3.625	1.6712*							
3.875	1.6675†							
4.125		1.6986						
4.375	1.7532†	1.7020						
4.625		1.7417	1.7573					
4.875		1.7208	1.7402					
5.125		1.7467	1.7494					
5.375		1.7510	1.7770	1.7220				
5.625	1.7617, 0.7902		0.7802	0.7761	0.7429			
5.875		1.7510	1.7694	1.7680				
6.125			1.7741	1.7934	1.8192	1.6540		
6.375		1.8326	1.8349	1.8164	1.8091	1.7451		
6.625		1.7982	1.8350	1.8382	1.8571	1.7915	1.7023	
6.875		1.8241	1.8176	1.8534	1.8246	1.8406	1.7290, 1.7684	
7.125		1.8205	1.8284	1.8254	1.8442	1.8123	1.7609	
7.375		1.8226	1.8306	1.8522	1.8462	1.8199	1.7654	1.6131

WTR1421
RUN 89

TUNNEL	I2 PRESSURE TEST
PSI CONFIGURATION	PSI#1(PR/IO) PSI

ALPH	9.96 deg	PIII	224.72 deg	P0	14.75 psia	T0	123.66 degf	MACH	2.0
			AVERAGED DATA		SCALE FACTOR:		1.0000		

BODY PRESSURES (PSI)

theta :	z/d	224.7	239.7	254.7	269.7	284.7	299.7
	0.5	3.7865					
	1.0	3.1981					
	1.5	2.6841					
	2.0	2.2886					
	2.5	2.0511	2.9521	3.1085	3.1604	3.1119	2.9504, 1.7772
	3.0	1.7159	2.2050	2.3117	2.3658	2.3081	2.4705, 1.4377
	3.5	1.7526					2.2272
	4.0	1.7309	1.8887	1.9618	2.0224	2.1018	2.1747
	4.3*	1.7126	1.3856	2.0212	2.1636	2.2285	2.4416
	4.5	1.6909	1.8897	2.0771	2.1325	2.2377	2.3678
	4.8	1.6965	1.8829	2.0456	2.1590	2.2645	2.4301
	5.0	1.7079	1.8999	2.1231	2.2483	2.3379	2.3450
	5.5	1.7331	1.9578	2.1578	2.3023	2.3124	2.4169
	6.0	1.6869	1.9656	2.0889	2.2419	2.3132	2.3578
	6.5	1.7865	1.8859	2.0668	2.2098	2.2813	2.3080
	7.0	1.9397	1.8422	2.0335	2.1672	2.2828	2.3142
	7.5	1.9449	1.9528	1.9816	2.0856	2.2053	2.3341
	8.0	1.9307	2.0382	2.1646	2.1138	2.2451	2.3000
			1.9308	2.1041	2.0994	1.9198	1.6228

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9085	1.0935	1.2185	1.3435
3.625	2.4489*							
3.875	2.4564+							
4.125	2.4580							
4.375	2.50051	2.4506						
4.625	2.4223		2.4895					
4.875	2.4982		2.4263					
5.125	2.3753		2.3676	2.4955				
5.375	2.3509		2.4134	2.4843				
5.625	2.1076, 0.3762		0.3894	0.4283	0.5095			
5.875	2.3102			2.3477				
6.125			2.3425	2.4020	2.4900	2.4884		
6.375	2.3609		2.3784	2.4078	2.4461	2.5305		
6.625	2.3032		2.3586	2.4001	2.4647	2.4823	2.5517	
6.875	2.3257		2.3274	2.3858	2.4121	2.4812	2.5294, 2.1994	
7.125	2.3000		2.3361	2.3496	2.3959	2.4087	2.4786	
7.375	2.3087		2.3097	2.3564	2.3774	2.3975	2.4268	2.4695

WHITE OAK LABORATORY

WTR1421	TUNNEL T2 PRESSURE TEST				WTR1421
RUN 90	PSI CONFIGURATION PSI#1(PR/IO) PSI#2(1C/I)				RUN 90
ALPH 14.97 deg	PHI 225.20 deg	P0 14.76 psia	10 124.00 degf	MACH 2.0	
	AVERAGED DATA	SCALE FACTOR 1.0000			

BODY PRESSURES (PSI)

BODY PRESSURES (PSI)

z/d	theta:	225.2	240.2	255.2	270.2	285.2	300.2
0.5		4.2075					
1.0		3.5752					
1.5		3.0135	3.4255	3.6843	3.7685	3.6790	3.3969, 1.3991
2.0		2.5718					2.8699, 1.0276
2.5		2.2824	2.5735	2.7623	2.8436	2.7449	2.5832
3.0		1.9064					
3.5		1.9347	2.1738	2.3242	2.4224	2.5325	2.6009
4.0		1.8882	1.3834	2.3979	2.5832	2.6818	2.9438
4.3		1.8723	2.1711	2.4608	2.6014	2.7547	2.8830
4.5		1.8423	2.1723	2.4350	2.6306	2.8192	2.9389
4.8		1.8461	2.1765	2.5252	2.6920	2.8184	2.8442
5.0		1.8472	2.2494	2.5488	2.7548	2.7936	2.9225
5.5		1.8521	2.2185	2.4546	2.6789	2.7896	2.8701
6.0		1.7942	2.1279	2.4160	2.6376	2.7475	2.8100
6.5		1.7740	2.0713	2.3811	2.5911	2.7472	2.8096
7.0		1.7216	2.0830	2.3059	2.4964	2.6597	2.8148
7.5		1.6748	2.0368	2.3984	2.5032	2.7071	2.7914
8.0		1.8590	1.8611	2.2500	2.2411	2.1916	1.6194

WING PRESSURES (PSI)

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	3.0147*							
3.875	3.0300+							
4.125	3.0218							
4.375	3.07971	3.0062						
4.625	2.9609		3.0572					
4.875	3.0508		2.9692					
5.125	2.8896		2.8731	3.0461				
5.375	2.8649		2.9441	3.0257				
5.625	1.8435, 0.8874		0.9023	0.9696	0.0619			
5.875	2.8167		2.8607	2.9251				
6.125			2.8477	2.9198	3.0271	3.0421		
6.375	2.8579		2.8797	2.9265	2.9751	3.0783		
6.625	2.7950		2.8509	2.9086	2.9883	3.0215	3.1116	
6.875	2.8170		2.8169	2.8976	2.9253	3.0135	3.0758, 2.4396	
7.125	2.7934		2.8265	2.8506	2.9034	2.9326	3.0190	
7.375	2.7867		2.7980	2.8560	2.8802	2.9156	2.9484	3.0141

[illegible]

z/d	theta:	BODY PRESSURES (PSI)					
		262.3	277.3	292.3	307.3	322.3	
0.5	247.3						
1.0	3.0517						
1.5	2.5994						
2.0	2.2018						
2.5	1.9252						
3.0	1.7755						
3.5	1.5382						
4.0	1.6413						
4.3	1.7030						
4.5	1.7086						
4.8	1.7205						
5.0	1.7460						
5.5	1.7709						
6.0	1.7929						
6.5	1.8311						
7.0	1.8642						
7.5	1.8912						
8.0	1.8783						
	1.8271						
		262.3	277.3	292.3	307.3	322.3	
		2.2658	2.2893	2.2913	2.2768		
		1.7580	1.7572	1.7562	1.7409		
		1.6231	1.6027	1.6083	1.6372	1.6504	
		2.0527	1.6774	1.6962	1.7003	1.7441	
		1.7036	1.7301	1.6856	1.7446	1.7237	
		1.7019	1.7139	1.7075	1.7496	1.7852	
		1.7344	1.7899	1.7480	1.7784	1.7241	
		1.8063	1.8064	1.8270	1.7609	1.8115	
		1.8090	1.7633	1.8070	1.8122	1.8158	
		1.8031	1.8155	1.8257	1.8113	1.7974	
		1.8153	1.8183	1.8163	1.8401	1.8274	
		1.8859	1.8104	1.7739	1.7951	1.8686	
		1.8933	1.9382	1.8185	1.8639	1.8373	
		1.8303	1.8593	1.8614	1.7890	1.9031	

z/d		r/d:	WING PRESSURES (PSI)					
		0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.6887*							
3.875	1.6854+							
4.125		1.7202						
4.375	1.76441	1.7233						
4.625		1.7420						
4.875	1.7388		1.7679					
5.125	1.7555		1.7407					
5.375	1.7651		1.7582	1.7400				
5.625	1.7803, 0.8073		1.7937	1.8032				
5.875		1.7636	0.7951	0.7965	0.7839			
6.125			1.7762	1.7777				
6.375	1.8474		1.7827	1.8056	1.8358	1.7177		
6.625	1.8067		1.8412	1.8301	1.8203	1.7944		
6.875	1.8376		1.8434	1.8520	1.8760	1.8234	1.7847	
7.125	1.8406		1.8318	1.8702	1.8510	1.8602	1.7917, 1.8203	
7.375		1.8436	1.8490	1.8422	1.8577	1.8260	1.8044	
			1.8457	1.8671	1.8591	1.8266	1.7904	1.7006

WTR1421
RUN 93

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH 9.99 deg PHI 247.03 deg PO 14.75 psia TO 124.39 degF MACH 2.0

AVERAGED DATA SCALE FACTOR: 1.0000

z/d	theta:	247.0	262.0	277.0	292.0	307.0	322.0
0.5	4.1682						
1.0	3.5458						
1.5	2.9969		3.1605	3.1895	3.0961	2.9098	2.6416, 1.9228
2.0	2.5623						2.2033, 1.5185
2.5	2.3081		2.3849	2.3840	2.3155	2.1510	1.9838
3.0	1.9515						
3.5	1.9764		2.0515	2.0270	1.9682	1.9807	2.0371
4.0	1.9753		2.0253	2.0638	2.1134	2.1787	2.4152
4.3	1.9582		2.0461	2.1408	2.1599	2.2728	2.3984
4.5	1.9383		2.0579	2.1458	2.2147	2.4205	2.4649
4.8	1.9626		2.1012	2.2620	2.2905	2.4217	2.3856
5.0	1.9947		2.1909	2.3015	2.4290	2.4041	2.4682
5.5	2.0345		2.1984	2.2991	2.3880	2.4245	2.4402
6.0	2.1525		2.1985	2.2916	2.3682	2.3931	2.3906
6.5	2.3048		2.2835	2.3077	2.3449	2.4042	2.3964
7.0	2.3163		2.3659	2.3292	2.3248	2.3562	2.4366
7.5	2.2961		2.3734	2.4719	2.3787	2.4362	2.4552
8.0	2.2717		2.2627	2.3735	2.3612	2.0730	1.6244

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	2.5638*							
3.875	2.5731+							
4.125	2.5702							
4.375	2.59741							
4.625	2.5310							
4.875	2.5786							
5.125	2.4746							
5.375	2.4650							
5.625	2.2946, 0.4898							
5.875	2.4289							
6.125								
6.375	2.4734							
6.625	2.4102							
6.875	2.4394							
7.125	2.4281							
7.375	2.4335							
		2.5843	2.5760	2.5828	0.5915			
		2.5361	2.4654	2.5299	0.5520			
		2.4641	2.4934	2.4641	2.5062			
		2.4457	2.5062	2.4898	2.5399			
		2.4673	2.5164	2.5190	2.5815			
		2.4500	2.5173	2.5186	2.5861			
		2.4540	2.4692	2.5090	2.5108			
		2.4324	2.4859	2.5054	2.5079			
						2.5707		
						2.6234		
						2.5899		
						2.6338		
						2.6182, 2.4009		
						2.5625		
						2.5102		
							2.5519	

WHITE OAK LABORATORY									
TUNNEL 12 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	14.98 deg	PHI	247.39 deg	P0	14.75 psia	TO	124.48 degf	MACH	2.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	247.4	262.4	277.4	292.4	307.4	322.4		
0.5	4.8542								
1.0	4.1720								
1.5	3.5518		3.7916	3.8207	3.6583	3.3338	2.8811, 1.6310		
2.0	3.0582						2.3979, 1.2139		
2.5	2.7339		2.8859	2.8826	2.7452	2.4576	2.1393		
3.0	2.3279								
3.5	2.3392		2.4670	2.4376	2.3286	2.3033	2.3596		
4.0	2.3204		2.0219	2.4840	2.5504	2.6164	2.7604		
4.3	2.2932		2.4535	2.5843	2.6212	2.7599	2.6999		
4.5	2.2723		2.4773	2.5944	2.6727	2.9124	2.7830		
4.8	2.3049		2.5230	2.7335	2.8268	2.9249	2.7400		
5.0	2.3365		2.6240	2.7846	2.9286	2.9167	2.8798		
5.5	2.3680		2.6436	2.7916	2.8962	2.9355	2.9208		
6.0	2.3723		2.6055	2.7626	2.8699	2.9102	2.9020		
6.5	2.4279		2.5748	2.7425	2.8385	2.9156	2.9136		
7.0	2.5912		2.6975	2.7020	2.7545	2.8248	2.9627		
7.5	2.6110		2.7527	2.9017	2.8272	2.8736	2.9655		
8.0	2.6080		2.5902	2.7842	2.7604	2.3600	1.8330		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	3.1872*								
3.875	3.2046+								
4.125	3.1648								
4.375	3.19301								
4.625	3.1060								
4.875	3.1438								
5.125	3.0387								
5.375	3.0229								
5.625	2.3772, 0.0458								
5.875	2.9849				0.1481				
6.125									
6.375	3.0121				3.1513	3.1238			
6.625	2.9533				3.1062	3.1856			
6.875	2.9916				3.1483	3.1509	3.1799		
7.125	2.9614				3.0765	3.1427	3.1600, 2.7756		
7.375	2.9601				3.0520	3.0873	3.1295		
					3.0449	3.0669	3.0549	3.0834	

WHITE OAK LABORATORY

WTR1421
RUN 96

ALPH 4.92 deg PIH 269.76 deg PO 14.74 psia TO 124.87 degF MACH 2.0
TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)
AVERAGED DATA SCALE FACTOR: 1.0000

WTR1421
RUN 96

z/d	theta:	284.8	299.8	314.8	329.8	344.8
0.5	3.6567					
1.0	3.1210					
1.5	2.6269	2.6767	2.6463	2.5633	2.4448	2.3045, 2.2851
2.0	2.2727					1.9330, 1.8397
2.5	2.0569	2.0323	1.9892	1.9262	1.8241	1.7613
3.0	1.7533					
3.5	1.7998	1.7880	1.7271	1.6876	1.6996	1.7528
4.0	1.8318	1.9620	1.7643	1.8004	1.8465	2.0576
4.3	1.8133	1.8071	1.8361	1.8198	1.9254	2.0350
4.5	1.8100	1.8089	1.8357	1.8579	2.0258	2.0933
4.8	1.8511	1.8598	1.9402	1.9384	2.0458	2.0179
5.0	1.9059	1.9611	1.9891	2.0667	2.0270	2.0975
5.5	1.9969	2.0186	1.9856	2.0536	2.0663	2.0803
6.0	2.0694	2.0406	2.0522	2.0651	2.0675	2.0660
6.5	2.1205	2.0703	2.0710	2.0680	2.1086	2.0890
7.0	2.1531	2.1473	2.0680	2.0296	2.0628	2.1353
7.5	2.1106	2.1335	2.1943	2.0804	2.1350	2.1280
8.0	2.0719	2.0680	2.1060	2.1010	1.8901	1.8991

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	2.1007*							
3.875	2.1034+							
4.125	2.1144							
4.375	2.1544							
4.625	2.1004	2.1500						
4.875	2.1307	2.1019						
5.125	2.0686	2.0659						
5.375	2.0675	2.1165						
5.625	2.0800, 0.1127	0.1164	2.1301					
5.875	2.0599	2.0874	0.1486	0.1688				
6.125		2.0843	2.1074					
6.375	2.1300	2.1313	2.1259	2.1766	2.1506			
6.625	2.0847	2.1402	2.1402	2.1492	2.2030			
6.875	2.1243	2.1304	2.1608	2.2014	2.1858	2.2161		
7.125	2.1239	2.1230	2.1798	2.1679	2.2044	2.2037, 2.2219		
7.375	2.1355	2.1500	2.1550	2.1806	2.1670	2.1811		
		2.1504	2.1842	2.1876	2.1708	2.1508	2.1482	

WTR1421
RUN 97

TUNNEL 12 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH	9.95 deg	PIII	269.73 deg	P0	14.74 psia	T0	125.08 degF	MACII	2.0
ALPH	9.95 deg	PIII	269.73 deg	P0	14.74 psia	T0	125.08 degF	MACII	2.0

BODY PRESSURES (PSI)

theta:	z/d	269.7	284.7	299.7	314.7	329.7	344.7
0.5	0.5	4.3397					
1.0	1.0	3.7211					
1.5	1.5	3.1508					
2.0	2.0	2.7015					
2.5	2.5	2.4409					
3.0	3.0	2.0724					
3.5	3.5	2.0979					
4.0	4.0	2.1074					
4.3	4.3	2.0722					
4.5	4.5	2.0479					
4.8	4.8	2.0616					
5.0	5.0	2.1164					
5.5	5.5	2.2794					
6.0	6.0	2.4118					
6.5	6.5	2.4772					
7.0	7.0	2.5041					
7.5	7.5	2.4910					
8.0	8.0	2.4513					
			2.69.7	2.84.7	2.99.7	3.14.7	3.29.7
			3.1732	3.0587	2.8472	2.5715	2.2685
			2.4021	2.2855	2.1114	1.8777	1.8783
							1.6839
			2.0720	1.9311	1.7799	1.6554	1.8448
			1.9403	1.9246	1.8789	1.9486	2.3694
			2.0388	1.9853	1.9548	2.1382	2.3616
			2.0194	1.9913	2.0350	2.3408	2.4241
			2.0656	2.1434	2.1840	2.3789	2.3437
			2.1844	2.2365	2.3723	2.3713	2.4231
			2.3151	2.2925	2.3856	2.4162	2.3921
			2.3796	2.3814	2.4082	2.4182	2.3660
			2.4259	2.4260	2.4275	2.4681	2.3949
			2.5115	2.4296	2.3917	2.4283	2.4664
			2.5078	2.5642	2.4506	2.5142	2.4799
			2.4373	2.4686	2.4534	2.0424	1.7469

WING PRESSURES (PSI)

z/d	$r/d:$	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	2.5492*							
3.875	2.5581†							
4.125	2.5722							
4.375	2.60031	2.5633						
4.625	2.5281		2.5873					
4.875	2.5370		2.5328					
5.125	2.4808		2.4711					
5.375	2.4595		2.5294	2.5345				
5.625	2.4403	0.4904	0.5267	2.5634				
5.875	2.4389		2.4914	0.5341	0.5484			
6.125			2.4875	2.5240				
6.375	2.4984		2.5266	2.5317	2.5730	2.5150		
6.625	2.4563		2.5314	2.5271	2.5399	2.5768		
6.875	2.4959		2.5175	2.5549	2.5916	2.5687	2.5716	
7.125	2.4919		2.5501	2.5688	2.5551	2.5864	2.5799, 2.5631	
7.375	2.4987		2.5350	2.5547	2.5720	2.5576	2.5690	
				2.5824	2.5867	2.5573	2.5459	2.5166

WHITE OAK LABORATORY

WTR1421
RUN 98

ALPH 14.96 deg PHI 270.04 deg PO 14.74 psia TO 125.23 degF MACH 2.0

PSI CONFIGURATION PSI#1(PR/IO) PSI#2(IC/I)

SCALE FACTOR: 1.0000

WTR1421
RUN 98

BODY PRESSURES (PSI)

z/d	theta:	270.0	285.0	300.0	315.0	330.0	345.0
0.5	5.1133						
1.0	4.4272						
1.5	3.7872						
2.0	3.2709		3.7829	3.5703	3.2009	2.7346	2.2440, 2.1649
2.5	2.9337		2.8782	2.6712	2.3647	1.9824	1.8441, 1.6795
3.0	2.5162						1.6283
3.5	2.5231		2.4712	2.2628	1.9619	1.8246	1.9440
4.0	2.5112		1.9392	2.2389	2.1062	2.2168	2.4337
4.3	2.4789		2.4205	2.2820	2.2058	2.4772	2.5615
4.5	2.4453		2.3964	2.2880	2.3209	2.6849	2.7436
4.8	2.4553		2.4401	2.4676	2.5153	2.7691	2.7323
5.0	2.4923		2.5620	2.5951	2.7543	2.7916	2.8410
5.5	2.6756		2.7235	2.6971	2.8188	2.8656	2.8413
6.0	2.8569		2.8224	2.8166	2.8609	2.8816	2.8310
6.5	2.9486		2.9023	2.8920	2.9040	2.9461	2.8790
7.0	2.9833		2.9813	2.9052	2.8770	2.9217	2.9590
7.5	2.9792		3.0092	3.0604	2.9457	3.0119	2.9858
8.0	2.9621		2.9348	2.9346	2.9067	2.2784	1.6762

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	3.0831*							
3.875	3.0988+							
4.125	3.1267							
4.375	3.16921							
4.625	3.0892							
4.875	3.0549							
5.125	2.8445							
5.375	2.8136							
5.625	2.7989, 0.8594							
5.875	2.8185				0.0368			
6.125								
6.375	2.8815					2.9850		
6.625	2.8568					3.0612		
6.875	2.9197					3.0677		
7.125	2.9308					3.0951		
7.375	2.9457					3.0712		
						3.0698		
							3.0332	
							3.0435, 3.0148	
							3.0502	
							3.0382	
								2.9608

WTR1421
RUN 99

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH 0.10 deg PHII 292.45 deg
AVERAGED DATA

P0 14.75 psia
SCALE FACTOR: 1.0000

MACII 2.0

WTR1421
RUN 99

theta: 292.4

z/d 0.5 307.4 322.4 337.4 352.4 367.4

0.5 3.0968

1.0 2.6397

1.5 2.2344

2.0 1.9520

2.5 1.7991

3.0 1.5546

3.5 1.6522

4.0 1.7072

4.3 1.7118

4.5 1.7262

4.8 1.7557

5.0 1.7833

5.5 1.8096

6.0 1.8494

6.5 1.8787

7.0 1.9175

7.5 1.8946

8.0 1.8422

2.2952

1.7795

1.6451

1.9042

1.7067

1.7078

1.7443

1.8215

1.8262

1.8163

1.8298

1.9139

1.9097

1.8445

2.3121

1.7740

1.6115

1.6818

1.7409

1.7229

1.8017

1.8215

1.7768

1.8282

1.8416

1.8355

1.9588

1.8819

2.3035

1.7689

1.6145

1.7134

1.7009

1.7185

1.7569

1.8418

1.8201

1.8377

1.8357

1.7915

1.8377

1.8832

2.2750

1.7447

1.6455

1.7264

1.7713

1.7702

1.7925

1.7667

1.8274

1.8302

1.8627

1.8111

1.8894

1.7928

2.2560, 2.2815

1.9151, 1.8588

1.7620

1.6681

1.7771

1.7571

1.8189

1.7442

1.8255

1.8230

1.8494

1.8837

1.8626

1.8996

WING PRESSURES (PSI)

z/d r/d: 0.5935

3.625 1.7317*

3.875 1.7289*

4.125 1.7589

4.375 1.7989 1.7610

4.625 1.7700

4.875 1.7679

5.125 1.7639

5.375 1.7685

5.625 1.8118, 0.8178

5.875 1.7815

6.125 1.8702

6.375 1.8277

6.625 1.8472

6.875 1.8541

7.125 1.8660

7.375 1.8660

0.7185

0.8435

0.9685

1.0935

1.2185

1.3435

1.8016

1.7693

1.7663

1.8021

0.8114

1.7966

1.8100

1.8698

1.8705

1.8481

1.8663

1.8682

1.7689

1.8168

0.8069

1.7977

1.8289

1.8542

1.8776

1.8916

1.8623

1.8926

0.8156

1.8563

1.8419

1.9024

1.8700

1.8817

1.8956

1.7604

1.8458

1.8552

1.8803

1.8490

1.8541

1.8450

1.8393, 1.8840

1.8353

1.8199

1.7822

WHITE OAK LABORATORY									
WTR1421 RUN 1		TUNNEL T2 PRESSURE TEST							
		PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)							
ALPH	4.95 deg	PHI	292.37 deg AVERAGED DATA	P0	14.75 psia SCALE FACTOR:	10 1.0000	125.59 degF	MACH	2.0
BODY PRESSURES (PSI)									
z/d	theta:	292.4	307.4	322.4	337.4	352.4	367.4		
0.5	3.6186								
1.0	3.0958								
1.5	2.6031								
2.0	2.2548		2.6035	2.5308	2.4197	2.2870	2.1574, 2.4474		
2.5	2.0408		1.9763	1.9019	1.8117	1.7132	1.8160, 1.9772		
3.0	1.7406						1.6679		
3.5	1.7934								
4.0	1.8118		1.7445	1.6642	1.5821	1.5917	1.7168		
4.3	1.7999		1.8910	1.6788	1.6961	1.7873	2.0207		
4.5	1.7965		1.7476	1.7445	1.7236	1.8907	2.0019		
4.8	1.8369		1.7470	1.7428	1.7851	1.9836	2.0559		
5.0	1.8883		1.7985	1.8671	1.9032	1.9996	1.9817		
5.5	1.9733		1.9130	1.9342	2.0099	1.9797	2.0614		
6.0	2.0516		1.9883	1.9608	2.0118	2.0350	2.0449		
6.5	2.1157		2.0154	2.0140	2.0300	2.0441	2.0487		
7.0	2.1130		2.0389	2.0266	2.0381	2.0880	2.0730		
7.5	2.0797		2.0993	2.0213	2.0005	2.0386	2.1135		
8.0	2.0495		2.0940	2.1513	2.0418	2.1147	2.1028		
			2.0460	2.0713	2.0674	1.8750	1.8935		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	2.0635*								
3.875	2.0654*								
4.125	2.0822								
4.375	2.12851	2.0799							
4.625	2.0877								
4.875	2.0893		2.1244						
5.125	2.0474		2.0890						
5.375	2.0366		2.0454						
5.625	2.0810	0.0882	2.0851						
5.875	2.0412		0.0840		0.1220				
6.125			2.0689		2.0765				
6.375	2.1238		2.0711		2.1482	2.0922			
6.625	2.0774		2.1321		2.1281	2.1587			
6.875	2.1104		2.1270		2.1752	2.1473	2.1584		
7.125	2.1072		2.1119		2.1431	2.1724	2.1530, 2.2357		
7.375	2.1152		2.1356		2.1351	2.1400	2.1376		
			2.1310		2.1617	2.1452	2.1248	2.0970	

WIR1421 RUN 2	ALPH	9.95 deg	P111	292.65 deg AVERAGED DATA	TUNNEL I2 PRESSURE TEST PSI CONFIGURATION PSI#1(PR/10) PSI#2(1C/1)	MACH	WTR1421 RUN 2	
					PO 14.76 psia SCALE FACTOR:	TO 125.79 degF 1.0000		
					BODY PRESSURES (PSI)			
	z/d	theta:	292.7	307.7	322.7	337.7	352.7	367.7
	0.5		4.2460					
	1.0		3.6522					
	1.5		3.0862	2.9813	2.7727	2.5023	2.2155	1.9527, 2.6031
	2.0		2.6460					1.6049, 2.0831
	2.5		2.3912	2.2436	2.0437	1.8212	1.5854	1.4377
	3.0		2.0306					
	3.5		2.0540					
	4.0		2.0516					
	4.3		2.0206					
	4.5		2.0044					
	4.8		2.0299					
	5.0		2.0671					
	5.5		2.1432					
	6.0		2.3072					
	6.5		2.3982					
	7.0		2.4071					
	7.5		2.3790					
	8.0		2.3569					

WING PRESSURE (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	2.3984*							
3.875	2.4049†							
4.125	2.4879							
4.375	2.52571							
4.625	2.4756							
4.875	2.4174		2.5141					
5.125	2.3548		2.3475					
5.375	2.3311		2.4647					
5.625	2.5018		0.4618	0.4657	0.4377			
5.875	2.3268		2.4520	2.4363				
6.125			2.4540	2.4884	2.4946	2.3905		
6.375			2.5263	2.5164	2.4865	2.4648		
6.625	2.3549		2.4987	2.5351	2.5534	2.4698	2.4377	
6.875	2.3943		2.4966	2.5667	2.5238	2.5143	2.4366, 2.6404	
7.125	2.3811		2.5155	2.5383	2.5408	2.4909	2.4568	
7.375	2.3869		2.4863	2.5641	2.5448	2.5067	2.4459	2.3695

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	14.96 deg	PHI	292.37 deg	P0	14.78 psia	TO	125.88 degf	MACH	2.0
			AVERAGED DATA		SCALE FACTOR:	1.0000			
BODY PRESSURES (PSI)									
z/d	theta:	307.4	322.4	337.4	352.4	367.4			
0.5	292.4								
1.0	4.9429								
1.5	4.2923								
2.0	3.6565								
2.5	3.1550								
3.0	2.8319								
3.5	2.4226								
4.0	2.4209								
4.3	2.4073								
4.5	2.3789								
4.8	2.3629								
5.0	2.3961								
5.5	2.4346								
6.0	2.4828								
6.5	2.5233								
7.0	2.7037								
7.5	2.7540								
8.0	2.7458								
	2.7375								
		307.4	322.4	337.4	352.4	367.4			
		3.4265	3.0490	2.5857	2.1149				
		2.5862	2.2449	1.8625	1.4787				
		2.1989	1.8523	1.4946	1.1904				
		1.8751	1.8198	1.4840	1.5174				
		2.1421	1.8321	1.4221	1.9480				
		2.3629	1.7671	1.5203	2.2862				
		2.3961	1.8286	1.7288	2.3980				
		2.4346	1.8583	2.1308	2.4572				
		2.4828	2.0540	2.5434	2.6127				
		2.5233	2.4697	2.6485	2.6998				
		2.7037	2.5435	2.6901	2.7892				
		2.7540	2.6587	2.6758	2.7597				
		2.7458	2.7672	2.7591	2.8443				
		2.7375	2.6626	2.6417	2.1157				

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	2.5047*							
3.875	2.5129*							
4.125	2.9818							
4.375	3.01041							
4.625	2.9518							
4.875	2.8400							
5.125	2.4846							
5.375	2.4777							
5.625	3.0399							
5.875	2.5260							
6.125								
6.375	2.6457							
6.625	2.6209							
6.875	2.6766							
7.125	2.6793							
7.375	2.7008							
		2.9893	2.8359	2.8359	0.8235			
		2.9603	2.9177	2.9177				
		2.4749	2.9393	2.9393				
		2.9218	0.9218	0.9411				
		2.9150	2.9429	2.9429				
		2.9006	3.0139	3.0139				
		2.9609	3.0506	3.0506				
		2.9238	3.0810	3.0810				
		2.9068	3.0938	3.0938				
		2.9070	3.0677	3.0677				
		2.8463	3.0831	3.0831				
					2.9633	2.7797		
					2.9644	2.8540		
					3.0455	2.8968		
					3.0216	2.9737		
					3.0530	2.9586		
					3.0408	2.9684		
							2.8100	
							2.8180.3.1573	
							2.8592	
							2.8541	
								2.7160

WIR1421 RUN 4	WHITE OAK LABORATORY	TUNNEL I2 PRESSURE TEST	WIR1421 RUN 4
ALPH -0.09 deg	PSI CONFIGURATION	PSI#1(PR/10) PSI#2(IC/1)	
	PHI 314.97 deg	P0 14.80 psia	
	AVERAGED DATA	SCALE FACTOR: 1.0000	
		T0 126.48 degF	
		MACH 2.0	

z/d	theta:	330.0	345.0	360.0	375.0	390.0
0.5	3.1141					
1.0	2.6508					
1.5	2.2497					
2.0	1.9686	2.3073	2.3143	2.3035	2.2784	2.2577, 2.3011
2.5	1.8126	1.7890	1.7828	1.7740	1.7497	1.9117, 1.8762
3.0	1.5639					1.7681
3.5	1.6681	1.6460	1.6199	1.6289	1.6635	1.6902
4.0	1.7138	2.0530	1.6990	1.7305	1.7439	1.7950
4.3	1.7235	1.7208	1.7560	1.7179	1.7862	1.7733
4.5	1.7390	1.7212	1.7375	1.7341	1.7845	1.8343
4.8	1.7688	1.7557	1.8130	1.7708	1.8074	1.7640
5.0	1.7999	1.8339	1.8321	1.8526	1.7815	1.8423
5.5	1.8254	1.8407	1.7914	1.8300	1.8371	1.8354
6.0	1.8626	1.8304	1.8419	1.8509	1.8405	1.8258
6.5	1.8892	1.8440	1.8540	1.8449	1.8705	1.8541
7.0	1.9319	1.9255	1.8439	1.8020	1.8206	1.8869
7.5	1.8927	1.9138	1.9678	1.8469	1.8927	1.8670
8.0	1.8455	1.8477	1.8841	1.8854	1.7951	1.9054

WING PRESSURES (PSI)

1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407</
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AD-A190 972

SURFACE PRESSURE MEASUREMENTS ON A HIGHLY SWEPT DELTA
MINGED WIND TUNNEL. (U) NAVAL SURFACE WEAPONS CENTER
SILVER SPRING MD A S COLLIER ET AL. AUG 86

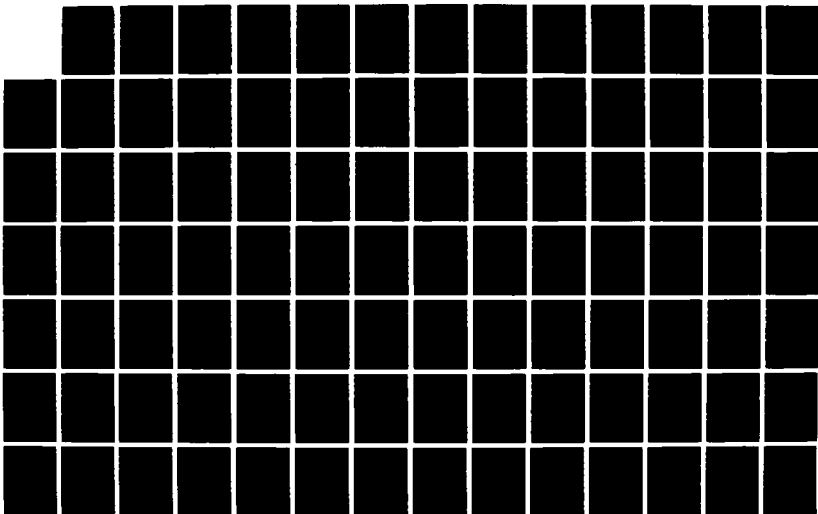
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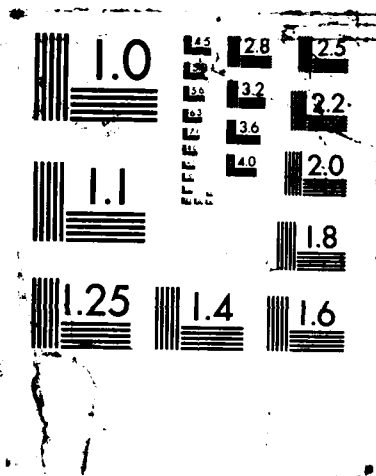
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WHITE OAK LABORATORY									
WTR1421 RUN 5		TUNNEL T2 PRESSURE TEST							
		PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)							
ALPH	4.94 deg	PHI	315.21 deg AVERAGED DATA	P0	14.81 psia SCALE FACTOR:	TO	126.68 degf	MACH	2.0
BODY PRESSURES (PSI)									
z/d	theta:	315.2	330.2	345.2	360.2	375.2	390.2		
0.5	3.4848								
1.0	2.9849								
1.5	2.5075		2.4689	2.3783	2.2661	2.1499	2.0526, 2.5914		
2.0	2.1713						1.7437, 2.1016		
2.5	1.9704		1.8799	1.7914	1.7147	1.6387	1.6300		
3.0	1.6767								
3.5	1.7396		1.6710	1.5670	1.5110	1.5507	1.7537		
4.0	1.7498		2.0332	1.5979	1.6223	1.7935	1.9461		
4.3	1.7414		1.6736	1.6604	1.6761	1.8334	1.9296		
4.5	1.7435		1.6667	1.6674	1.7406	1.9073	1.9837		
4.8	1.7744		1.7140	1.7944	1.8315	1.9336	1.9165		
5.0	1.8136		1.8229	1.8660	1.9332	1.9147	1.9945		
5.5	1.8797		1.9235	1.8831	1.9423	1.9775	1.9875		
6.0	1.9936		1.9321	1.9333	1.9648	1.9887	1.9941		
6.5	2.0083		1.9330	1.9423	1.9689	2.0343	2.0194		
7.0	2.0118		1.9919	1.9310	1.9276	1.9795	2.0554		
7.5	1.9831		1.9911	2.0568	1.9767	2.0530	2.0379		
8.0	1.9428		1.9426	1.9773	1.9762	1.8406	1.8735		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	1.9643*								
3.875	1.9654*								
4.125	2.0021								
4.375	2.05051								
4.625	2.0156								
4.875	2.0114								
5.125	1.9817		2.0483						
5.375	1.9789		2.0168						
5.625	2.0435, 0.0343		2.0219						
5.875	1.9826		0.0250		0.0478				
6.125			2.0092		2.0065				
6.375	2.0690		2.0215		2.0460	2.0068			
6.625	2.0265		2.0834		2.0724	2.0863			
6.875	2.0573		2.0836		2.0978	2.0798			
7.125	2.0508		2.0711		2.1151	2.1093	2.0870		
7.375	2.0625		2.0898		2.0849	2.0692	2.0847, 2.1750		
			2.0789		2.1108	2.0798	2.0692		
							2.0489	2.0160	

WTR1421
RUN 6

WIITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH 9.97 deg PHI 315.13 deg PO 14.81 psia TO 126.77 degF MACH 2.0

AVERAGED DATA SCALE FACTOR: 1.0000

WTR1421
RUN 6

z/d	theta:	315.1	345.1	360.1	375.1	390.1
0.5	3.9195					
1.0	3.3627					
1.5	2.8243					
2.0	2.4236					
2.5	2.1827					
3.0	1.8385					
3.5	1.8534					
4.0	1.8363					
4.3	1.8260					
4.5	1.8063					
4.8	1.8252					
5.0	1.8390					
5.5	1.8637					
6.0	1.8569					
6.5	1.9807					
7.0	2.0749					
7.5	2.0577					
8.0	2.0355					

z/d	theta:	315.1	345.1	360.1	375.1	390.1
0.5	3.9195					
1.0	3.3627					
1.5	2.8243					
2.0	2.4236					
2.5	2.1827					
3.0	1.8385					
3.5	1.8534					
4.0	1.8363					
4.3	1.8260					
4.5	1.8063					
4.8	1.8252					
5.0	1.8390					
5.5	1.8637					
6.0	1.8569					
6.5	1.9807					
7.0	2.0749					
7.5	2.0577					
8.0	2.0355					

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	2.1926*							
3.875	2.1964*							
4.125	2.3015							
4.375	2.3441							
4.625	2.3075							
4.875	2.2375							
5.125	2.1900							
5.375	2.1757							
5.625	2.4241							
5.875	2.1604							
6.125								
6.375								
6.625								
6.875								
7.125								
7.375								

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	2.1926*							
3.875	2.1964*							
4.125	2.3015							
4.375	2.3441							
4.625	2.3075							
4.875	2.2375							
5.125	2.1900							
5.375	2.1757							
5.625	2.4241							
5.875	2.1604							
6.125								
6.375								
6.625								
6.875								
7.125								
7.375								

WTR1421
RUN 7

TUNNEL 12 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH	14.98 deg	PHI	315.08 deg	P0	14.81 psia	T0	126.87 degf	MACH	2.0
				AVERAGED DATA				SCALE FACTOR: 1.0000	

BODY PRESSURES (P_{SI})

theta:	315.1	330.1	345.1	360.1	375.1	390.1
z/d	0.5	0.5				
1.0	3.7780					
1.5	3.1854					
2.0	2.7357					
2.5	2.4468					
3.0	2.0648					
3.5	2.0482					
4.0	2.0324					
4.5	2.0140					
4.5	1.9952					
4.8	2.0136					
5.0	2.0110					
5.5	2.0244					
6.0	1.9964					
6.5	1.9560					
7.0	1.9035					
7.5	1.8643					
8.0	2.0544					
		2.0512	2.2067	2.1992	1.8912	1.7711
		2.0524	2.3579	2.3000	2.2698	2.0723
		1.8358	2.1476	2.1909	2.1533	2.1066
		1.5326	2.0510	2.1468	2.2090	2.0725
		1.5650	1.7292	2.0637	2.1561	2.0050
		1.6526	1.3124	1.9675	2.0478	1.9362
		1.6810	1.3215	1.6485	1.7838	1.8221
		1.6177	1.2982	1.3915	1.7736	1.5902
		1.6144	1.2433	1.2404	1.7437	1.5099
		1.6661	1.3020	1.1259	1.6146	1.4325
		1.9997	1.3092	1.0567	1.2727	1.4149
		1.7338	1.3643	1.0211	0.8954	1.1519
		2.0892	1.7152	1.3601	1.0604	0.9070
		2.8220	2.4036	1.9579	1.5839	1.3712, 3.3779
						1.0708, 2.7512

WING PRESSURES (PSI)

z/d	$r/d:$	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	2.0437*							
3.875	2.0455+							
4.125	2.6157							
4.375	2.66781							
4.625	2.5547		2.6533					
4.875	2.5786		2.5596					
5.125	1.8282		1.8297	2.5756				
5.375	1.8718		2.4285	2.6715				
5.625	2.9329, 0.9538		0.3733	0.6951	0.5700			
5.875	1.9694		2.3238	2.7140				
6.125			2.2599	2.7371	2.7395	2.5303		
6.375	2.0826		2.2588	2.7370	2.7424	2.6098		
6.625	2.0831		2.2229	2.7242	2.8117	2.6410	2.5234	
6.875	2.1503		2.2017	2.7234	2.7910	2.7177	2.5228, 3.1481	
7.125	2.1728		2.2337	2.6537	2.8048	2.6998	2.5627	
7.375	2.1754		2.2010	2.6641	2.7980	2.7158	2.5700	2.4006

WHITE OAK LABORATORY

WTR1421 TUNNEL T2 PRESSURE TEST WTR1421
 RUN 10 PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1) RUN 10

ALPH 9.92 deg PHI 337.62 deg PO 14.88 psia TO 128.19 degF MACH 2.0
 AVERAGED DATA SCALE FACTOR: 1.0000

z/d	theta:	352.6	367.6	382.6	397.6	412.6
0.5	3.4370					
1.0	2.9300					
1.5	2.4380					
2.0	2.0925	2.2435	2.0445	1.8857	1.7720	1.7440, 3.1566
2.5	1.8733	1.6600	1.4885	1.3849	1.3636	1.5075, 2.5637
3.0	1.5585					1.4541
3.5	1.5861	1.3850	1.2061	1.1460	1.3217	1.6427
4.0	1.5534	1.8124	1.1822	1.2005	1.6689	1.8172
4.3	1.5248	1.3257	1.1987	1.2841	1.7367	1.8019
4.5	1.4927	1.2661	1.1345	1.4368	1.8151	1.8387
4.8	1.5008	1.2629	1.2127	1.6424	1.8589	1.7498
5.0	1.4830	1.3214	1.2802	1.8069	1.8423	1.8337
5.5	1.4889	1.3074	1.5752	1.8835	1.9368	1.8340
6.0	1.4710	1.3802	1.7137	1.8931	1.9522	1.8568
6.5	1.4436	1.5938	1.7907	1.8715	1.9832	1.8817
7.0	1.6313	1.7230	1.7862	1.8132	1.8782	1.8967
7.5	1.6710	1.7559	1.9560	1.8667	1.9324	1.8659
8.0	1.6820	1.6889	1.8977	1.8989	1.7473	1.7708

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.9544*							
3.875	1.9549+							
4.125	2.0755							
4.375	2.12461	2.0737						
4.625	2.0890							
4.875	2.0629							
5.125	2.0050							
5.375	1.9802							
5.625	2.2671, 0.0155							
5.875	1.9675				0.0619			
6.125								
6.375	2.0303				2.1439	2.0298		
6.625	1.9543				2.1434	2.1184		
6.875	1.9768				2.2075	2.1223	2.0935	
7.125	1.9569				2.1627	2.1562	2.0905, 2.3955	
7.375	1.9540				2.1691	2.1132	2.0749	
					2.1743	2.1220	2.0740	1.9953

WHITE OAK LABORATORY

[illegible]

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.9469*							
3.875	1.9475+							
4.125		2.2275						
4.375	2.2687	2.2231						
4.625	2.2164		2.2621					
4.875	2.2243		2.2190					
5.125	1.7827		1.7846	2.2233				
5.375	1.7091		2.0878	2.2763				
5.625	2.7083	0.6929	0.9814	0.2668	0.2344			
5.875	1.6086		1.8209	2.2194				
6.125			1.6539	2.1844	2.3260	2.1908		
6.375	1.6487		1.5544	2.1410	2.3171	2.2835		
6.625	1.6625		1.4501	2.0386	2.3829	2.3234	2.2505	
6.875	1.7276		1.4477	1.9857	2.3326	2.3722	2.2365, 2.8723	
7.125	1.7192		1.5287	1.8901	2.3421	2.3431	2.2516	
7.375	1.7001		1.4705	1.9279	2.3501	2.3709	2.2510	2.1211

WHITE OAK LABORATORY									
WIR1421 RUN 12					WTR1421 RUN 12				
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	-0.08 deg	PHI	360.23 deg AVERAGED DATA	P0	14.88 psia SCALE FACTOR:	TO	128.43 degf	MACH	2.0
BODY PRESSURES (PSI)									
z/d	theta:	360.2	375.2	390.2	405.2	420.2	435.2		
0.5	3.1274								
1.0	2.6688								
1.5	2.2479								
2.0	1.9787		2.3058	2.3141	2.3065	2.2742	2.2528, 2.3370		
2.5	1.8227		1.7945	1.7874	1.7816	1.7563	1.9126, 1.8938		
3.0	1.5740						1.7773		
3.5	1.6804		1.6690	1.6480	1.6617	1.6880	1.7040		
4.0	1.7440		1.7680	1.7211	1.7522	1.7639	1.8152		
4.3	1.7455		1.7411	1.7790	1.7350	1.8140	1.8046		
4.5	1.7568		1.7371	1.7566	1.7541	1.8111	1.8616		
4.8	1.7811		1.7690	1.8354	1.7894	1.8288	1.7766		
5.0	1.8102		1.8484	1.8489	1.8736	1.7897	1.8635		
5.5	1.8378		1.8529	1.7931	1.8374	1.8425	1.8412		
6.0	1.8789		1.8405	1.8496	1.8485	1.8401	1.8273		
6.5	1.8844		1.8244	1.8455	1.8344	1.8640	1.8413		
7.0	1.9161		1.9049	1.8101	1.7610	1.7827	1.8599		
7.5	1.8869		1.9046	1.9535	1.8119	1.8682	1.8355		
8.0	1.8508		1.8531	1.8993	1.9004	1.7916	1.8981		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.7761*							
3.875	1.7741*							
4.125	1.8001							
4.375	1.85031	1.8021	1.8521					
4.625	1.8045	1.8041	1.8041					
4.875	1.8042	1.8008	1.8008	1.8048				
5.125	1.7986	1.8261	1.8422	1.8442				
5.375	1.7868	0.8233	0.8219	0.8219	0.8282			
5.625	1.8409, 0.8307	1.7936	1.7936	1.8023				
5.875	1.7792	1.7998	1.7998	1.8228	1.8555	1.7563		
6.125		1.8621	1.8607	1.8442	1.8308	1.8388		
6.375	1.8121	1.8617	1.8617	1.8657	1.8901	1.8424	1.8341	
6.625	1.8442	1.8394	1.8394	1.8854	1.8583	1.8737	1.8276, 1.8941	
6.875	1.8438	1.8602	1.8602	1.8559	1.8730	1.8357	1.8225	
7.125	1.8566	1.8653	1.8653	1.8881	1.8815	1.8437	1.8172	
7.375								1.7893

WTR1421	WHITE OAK LABORATORY	TUNNEL T2 PRESSURE TEST	WTR1421
RUN 14		PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)	RUN 14
ALPH	9.92 deg	PHI 359.96 deg	128.52 degF
		AVERAGED DATA	
		P0 14.89 psia	
		SCALE FACTOR: 1.0000	
		TO	MACH 2.0

z/d	theta:	360.0	375.0	390.0	405.0	420.0	435.0
0.5		2.9519					
1.0		2.4937					
1.5		2.0591	1.9378	1.8375	1.7979	1.7788	1.7905, 3.1514
2.0		1.7685					1.5864, 2.5675
2.5		1.5862	1.4400	1.3874	1.4204	1.4700	1.5567
3.0		1.2984					
3.5		1.3067	1.2109	1.1993	1.3539	1.5316	1.6271
4.0		1.2863	1.7388	1.2575	1.5301	1.6465	1.7548
4.3		1.2486	1.1691	1.3729	1.5557	1.6839	1.7285
4.5		1.2054	1.1199	1.3709	1.5855	1.7032	1.7724
4.8		1.2038	1.1494	1.5222	1.6520	1.7232	1.6813
5.0		1.1918	1.2513	1.5799	1.7499	1.6793	1.7651
5.5		1.1871	1.4067	1.5843	1.7378	1.7476	1.7540
6.0		1.2461	1.4661	1.6531	1.7420	1.7374	1.7312
6.5		1.3518	1.5026	1.6824	1.7123	1.7643	1.7228
7.0		1.4294	1.6092	1.6527	1.6339	1.6519	1.7136
7.5		1.4347	1.6274	1.8064	1.6870	1.7117	1.6734
8.0		1.4452	1.4587	1.7611	1.7660	1.6673	1.7299

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.7913*							
3.875	1.7893+							
4.125	1.8542							
4.375	1.92151	1.8553						
4.625	1.8894		1.9220					
4.875	1.8799		1.8892					
5.125	1.8552		1.8563	1.8798				
5.375	1.8467		1.9189	1.9237				
5.625	2.0542, 0.8928		0.9134	0.9143	0.9067			
5.875	1.8403		1.9014	1.8912				
6.125			1.8959	1.9318	1.9577	1.8514		
6.375	1.9001		1.9525	1.9498	1.9329	1.9366		
6.625	1.8330		1.9377	1.9681	1.9870	1.9335	1.9260	
6.875	1.8472		1.9076	1.9840	1.9552	1.9649	1.9212, 2.0063	
7.125	1.8277		1.9137	1.9487	1.9535	1.9236	1.9067	
7.375	1.8187		1.8908	1.9714	1.9692	1.9275	1.8871	1.8526

WHITE OAK LABORATORY

WTR1421
RUN 15TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)WTR1421
RUN 15ALPH 14.95 deg PHI 360.60 deg AVERAGED DATA P0 14.91 psia T0 128.55 degF MACH 2.0
SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	360.6	375.6	390.6	405.6	420.6	435.6
0.5	2.7801						
1.0	2.3036						
1.5	1.8746		1.6080	1.4584	1.4543	1.5258	1.6345, 3.7228
2.0	1.5808						1.4640, 3.0448
2.5	1.3778		1.0979	0.9568	1.0804	1.3123	1.4601
3.0	1.0824						
3.5	1.0464		0.7788	0.7046	1.0056	1.3629	1.4612
4.0	0.9875		1.7111	0.8094	1.0221	1.3806	1.5242
4.3	0.9322		0.7288	0.9778	1.0549	1.3359	1.4558
4.5	0.8750		0.7408	1.0104	1.0508	1.2377	1.5115
4.8	0.8810		0.7995	1.1823	1.1188	1.1215	1.4039
5.0	0.8400		0.9641	1.2843	1.2356	0.9495	1.4619
5.5	0.8556		1.1941	1.2896	1.2403	0.8901	1.4541
6.0	1.0692		1.3075	1.3844	1.2452	0.8801	1.4728
6.5	1.2802		1.3853	1.3847	1.1890	1.0214	1.4327
7.0	1.4293		1.4890	1.3488	1.1767	1.0370	1.3548
7.5	1.4507		1.5003	1.5102	1.2966	1.2922	1.2662
8.0	1.4436		1.4572	1.4886	1.5010	1.4005	1.4309

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	1.7658*							
3.875	1.7637+							
4.125	1.8930							
4.375	1.9620							
4.625	1.9144							
4.875	1.9247							
5.125	1.8116							
5.375	1.8009							
5.625	2.3888, 0.8197							
5.875	1.7149				0.9145			
6.125					1.8729			
6.375	1.6992				1.8744			
6.625	1.6006				1.7532			
6.875	1.5844				1.8871			
7.125	1.5340				1.7182			
7.375	1.5062				1.8761			
					1.8542			
					1.7693			
					1.7481			
					1.9198			
					1.8978			
					1.9292			
					1.9270			
					1.9475, 2.2543			
					1.9287			
					1.9049			
					1.8627			

WHITE OAK LABORATORY									
WTR1421 RUN 24					TUNNEL T2 PRESSURE TEST				
ALPH -0.06 deg					PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)				
PIII					-1.81 deg				
theta:					PO 14.83 psia				
z/d					SCALE FACTOR: 1.0000				
					BODY PRESSURES (PSI)				
					13.2	28.2	43.2	58.2	73.2
0.5	0.9368								
1.0	0.7468								
1.5	0.5992				0.5952	0.5965	0.5916	0.5948	0.5813, 0.5871
2.0	0.4628								0.4606, 0.4667
2.5	0.4073				0.4130	0.4053	0.4035	0.4015	0.3958
3.0	0.3510								
3.5	0.3373				0.3418	0.3514	0.3517	0.3532	0.3550
4.0	0.3507				0.3530	0.3556	0.3537	0.3553	0.3535
4.3	0.3581				0.3586	0.3543	0.3633	0.3553	0.3604
4.5	0.3651				0.3679	0.3691	0.3698	0.3627	0.3617
4.8	0.3716				0.3723	0.3639	0.3740	0.3683	0.3771
5.0	0.3760				0.3679	0.3681	0.3721	0.3804	0.3745
5.5	0.3845				0.3816	0.3911	0.3830	0.3814	0.3853
6.0	0.3848				0.3905	0.3872	0.3892	0.3900	0.3878
6.5	0.3838				0.3901	0.3929	0.3961	0.3886	0.3959
7.0	0.3880				0.3904	0.4010	0.4049	0.4031	0.3995
7.5	0.3908				0.3910	0.3861	0.4005	0.3978	0.4056
8.0	0.4150				0.4492	0.4120	0.4453	0.3750	0.3460

WING PRESSURES (PSI)

WTR1421 RUN 24					TUNNEL T2 PRESSURE TEST				
ALPH -0.06 deg					PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)				
PIII					-1.81 deg				
theta:					PO 14.83 psia				
z/d					SCALE FACTOR: 1.0000				
					BODY PRESSURES (PSI)				
					13.2	28.2	43.2	58.2	73.2
3.625	0.5935								
3.875	0.3994*								
4.125	0.3808*								
4.375	0.36551	0.3941							
4.625	0.4023								
4.875	0.3900								
5.125	0.3988								
5.375	0.3806								
5.625	0.3888	0.3870							
5.875	0.3859								
6.125	0.3979								
6.375	0.3972								
6.625	0.3961								
6.875	0.3998								
7.125	0.4072								
7.375									

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	4.92 deg	PHI	-1.80 deg	P0	14.82 psia	T0	105.73 degf	MACH	3.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	13.2	28.2	43.2	58.2	73.2			
0.5	0.9217								
1.0	0.7342								
1.5	0.5862								
2.0	0.4496	0.5443	0.5140	0.4899	0.4785	0.4626, 0.7516			
2.5	0.3923	0.3728	0.3491	0.3388	0.3340	0.3739, 0.5947			
3.0	0.3298					0.3289			
3.5	0.3083	0.3000	0.3064	0.3109	0.3159	0.3168			
4.0	0.3143	0.3079	0.3137	0.3163	0.3195	0.3189			
4.3	0.3190	0.3126	0.3128	0.3262	0.3180	0.3258			
4.5	0.3194	0.3172	0.3234	0.3258	0.3212	0.3285			
4.8	0.3235	0.3197	0.3163	0.3265	0.3224	0.3474			
5.0	0.3247	0.3142	0.3176	0.3231	0.3329	0.3572			
5.5	0.3308	0.3271	0.3423	0.3353	0.3502	0.3838			
6.0	0.3270	0.3339	0.3346	0.3441	0.3765	0.3894			
6.5	0.3244	0.3251	0.3378	0.3649	0.3798	0.3964			
7.0	0.3191	0.3273	0.3654	0.3903	0.3967	0.3987			
7.5	0.3224	0.3338	0.3605	0.3888	0.3907	0.4072			
8.0	0.3502	0.3867	0.3884	0.4226	0.3630	0.3545			
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	0.3744*								
3.875	0.3556+								
4.125	0.3591								
4.375	0.3516	0.3756							
4.625	0.3931								
4.875	0.3819								
5.125	0.3939								
5.375	0.3826								
5.625	0.4263	0.3905							
5.875	0.3921								
6.125									
6.375	0.4051								
6.625	0.4047								
6.875	0.4003								
7.125	0.4036								
7.375	0.4028								
		0.3781							
		0.3850							
		0.4140							
		0.3844							
		0.3884							
		0.3946							
		0.3966							
		0.4063							
		0.4047							
		0.4003							
		0.4036							
		0.4020							
		0.3984							
		0.3883							
		0.3790							
		0.3841							
		0.3898							
		0.3968							
		0.4007							
		0.3980							
		0.4009							
		0.4056							
		0.4081							
		0.4099							
		0.4133							
		0.4073							
		0.4004							
		0.3972							
		0.3831							
		0.4003							
		0.4030							
		0.4066							
		0.3961							
		0.3953							
		0.3884							
		0.3906, 0.4082							
		0.3941							
		0.3917							
		0.3717							

WTR1421
RUN 26

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)

ALPH 9.93 deg PHI -1.83 deg PO 14.81 psia TO 106.06 degF MACH 3.0

SCALE FACTOR: 1.0000

z/d theta: -1.8

0.5	0.8811	13.2	28.2	43.2	58.2	73.2
1.0	0.6968					
1.5	0.5480	0.4689	0.4163	0.3853	0.3779	0.3742, 0.9678
2.0	0.4173					0.3080, 0.7654
2.5	0.3565	0.3052	0.2645	0.2624	0.2719	0.2781
3.0	0.2839					
3.5	0.2519	0.2154	0.2342	0.2405	0.2460	0.2643
4.0	0.2440	0.2149	0.2346	0.2352	0.2263	0.2766
4.3	0.2412	0.2186	0.2322	0.2414	0.2192	0.2958
4.5	0.2307	0.2215	0.2371	0.2364	0.2197	0.3314
4.8	0.2292	0.2290	0.2346	0.2392	0.2226	0.3330
5.0	0.2224	0.2303	0.2366	0.2404	0.2349	0.3255
5.5	0.2289	0.2404	0.2633	0.2559	0.2395	0.3266
6.0	0.2215	0.2461	0.2641	0.2712	0.2478	0.3203
6.5	0.2309	0.2493	0.2573	0.2897	0.2600	0.3202
7.0	0.2480	0.2580	0.2629	0.3031	0.2847	0.3148
7.5	0.2655	0.2685	0.2598	0.2929	0.2876	0.3126
8.0	0.2993	0.3374	0.2935	0.3305	0.2617	0.2807

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.3684*							
3.875	0.3493+							
4.125	0.3715							
4.375	0.36991	0.3882						
4.625	0.4076							
4.875	0.3953							
5.125	0.3834							
5.375	0.3672			0.4019				
5.625	0.5236	0.3742		0.3964				
5.875	0.3687			0.3974	0.3957			
6.125				0.4019	0.4091	0.3997		
6.375	0.3748			0.4051	0.4056	0.4071		
6.625	0.3718			0.4077	0.4135	0.4077	0.4066	
6.875	0.3633			0.4142	0.4121	0.4125	0.4067, 0.4878	
7.125	0.3598			0.3978	0.4064	0.4016	0.3981	
7.375	0.3533			0.3922	0.4017	0.4014	0.3957	0.3889

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	14.91 deg	PHI	-1.79 deg	P0	14.81 psia	10	106.51 degF	MACH	3.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	13.2	28.2	43.2	58.2	73.2			
0.5	-1.8								
1.0	0.8361								
1.5	0.6530								
2.0	0.5100	0.3908	0.3095	0.2794	0.2957	0.3057, 1.2293			
2.5	0.3883	0.2408	0.1775	0.1949	0.2011	0.2452, 0.9814			
3.0	0.3284					0.2056			
3.5	0.2538								
4.0	0.2196	0.1540	0.1672	0.1696	0.1544	0.1724			
4.3	0.2100	0.1491	0.1714	0.1680	0.1459	0.1807			
4.5	0.2042	0.1516	0.1702	0.1681	0.1552	0.1756			
4.8	0.1925	0.1503	0.1712	0.1662	0.1662	0.1805			
5.0	0.1914	0.1605	0.1723	0.1757	0.1679	0.1777			
5.5	0.1977	0.1710	0.1796	0.1867	0.1741	0.1853			
6.0	0.1887	0.1915	0.2003	0.2071	0.1909	0.1960			
6.5	0.1843	0.2053	0.2065	0.2162	0.2023	0.1971			
7.0	0.1917	0.2172	0.2155	0.2140	0.2024	0.2038			
7.5	0.2094	0.2259	0.2273	0.2147	0.2049	0.2027			
8.0	0.2289	0.2350	0.2333	0.2212	0.2099	0.2124			
	0.2511	0.2907	0.2548	0.2927	0.2050	0.2169			
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	0.3313*								
3.875	0.3116+								
4.125	0.3409								
4.375	0.33871	0.3579							
4.625	0.3582	0.3653							
4.875	0.3951	0.3502							
5.125	0.2738	0.2959	0.4016						
5.375	0.2446	0.2836	0.3695						
5.625	0.6708, 0.2398	0.2643	0.3532	0.3934					
5.875	0.2303	0.2437	0.3427						
6.125		0.2248	0.3264	0.3984	0.4043				
6.375	0.2297	0.2174	0.3090	0.3873	0.4146				
6.625	0.2255	0.2039	0.2871	0.3881	0.4166				
6.875	0.2133	0.1804	0.2642	0.3616	0.4139				
7.125	0.2140	0.1732	0.2236	0.3362	0.3901				
7.375	0.2114	0.1708	0.2082	0.3166	0.3847				
							0.4201		
							0.4210, 0.6184		
							0.4068		
							0.4034	0.4000	

WHITE OAK LABORATORY

WIR1421
RUN 28

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH -0.09 deg PIH 20.6 theta: 0.9288 0.5
20.56 deg 35.6 50.6 65.6 80.6 95.6
AVERAGED DATA PO 14.80 psia TO 106.87 degf MACH 3.0
SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.3	4.5	4.8	5.0	5.5	6.0	6.5	7.0	7.5	8.0
0.5	0.9288																		
1.0	0.7376																		
1.5	0.5885																		
2.0	0.4630																		
2.5	0.4101																		
3.0	0.3412																		
3.5	0.3377																		
4.0	0.3499																		
4.3	0.3544																		
4.5	0.3605																		
4.8	0.3665																		
5.0	0.3718																		
5.5	0.3800																		
6.0	0.3827																		
6.5	0.3846																		
7.0	0.3885																		
7.5	0.3903																		
8.0	0.4095																		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.3926*							
3.875	0.3744*							
4.125	0.3702							
4.375	0.36021							
4.625	0.3947							
4.875	0.3807							
5.125	0.3940							
5.375	0.3751							
5.625	0.3853							
5.875	0.3795							
6.125	0.3963							
6.375	0.3915							
6.625	0.3901							
6.875	0.3935							
7.125	0.3978							
7.375								

WHITE OAK LABORATORY

WTR1421
RUN 29

ALPH 4.92 deg PHI 20.76 deg
AVERAGED DATA

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSIN1(PR/10) PSIN2(TC/1)

WTR1421
RUN 29

PO 14.80 psia
SCALE FACTOR: 1.0000

TO 107.09 degF

MACH 3.0

BODY PRESSURES (PSI)

z/d	theta:	35.8	50.8	65.8	80.8	95.8
0.5	0.8293					
1.0	0.6561					
1.5	0.5205	0.4969	0.4823	0.4688	0.4663	0.4603, 0.7221
2.0	0.4077					0.3711, 0.5601
2.5	0.3612	0.3485	0.3349	0.3315	0.3295	0.3290
3.0	0.2975					
3.5	0.2904	0.2927	0.3027	0.3034	0.3055	0.2974
4.0	0.2984	0.3014	0.3062	0.3068	0.3078	0.2969
4.3	0.3015	0.3046	0.3058	0.3126	0.3104	0.3048
4.5	0.3028	0.3057	0.3125	0.3139	0.3158	0.3159
4.8	0.3064	0.3093	0.3113	0.3176	0.3231	0.3276
5.0	0.3084	0.3089	0.3106	0.3213	0.3297	0.3348
5.5	0.3134	0.3147	0.3240	0.3321	0.3466	0.3525
6.0	0.3080	0.3160	0.3218	0.3506	0.3636	0.3616
6.5	0.3030	0.3135	0.3345	0.3625	0.3653	0.3715
7.0	0.3096	0.3223	0.3488	0.3670	0.3730	0.3764
7.5	0.3095	0.3281	0.3480	0.3651	0.3720	0.3766
8.0	0.3367	0.3737	0.3708	0.4053	0.3520	0.3645

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.2807*							
3.875	0.2600*							
4.125	0.25421	0.2539						
4.625	0.3454	0.2828						
4.875	0.2443	0.3371						
5.125	0.3597	0.3805						
5.375	0.3454	0.3472						
5.625	0.3798, 0.3565	0.3506						
5.875	0.3562	0.3547		0.2379				
6.125		0.3586		0.3642	0.3021	0.2453		
6.375	0.3765	0.3724		0.3693	0.3583	0.2558		
6.625	0.3735	0.3745		0.3742	0.3810	0.2602	0.2654	
6.875	0.3707	0.3685		0.3808	0.3776	0.3147	0.2672, 0.2524	
7.125	0.3757	0.3702		0.3688	0.3719	0.3524	0.2511	
7.375	0.3732	0.3694		0.3710	0.3707	0.3689	0.2577	0.2577

WHITE OAK LABORATORY

WTR1421
- RUN 30

WIR 1421
RUN 30

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPHI	9.93 deg	PHI	20.76 deg	P0	14.80 psia	T0	107.19 degF	MACH	3.0
				AVERAGED DATA		SCALE FACTOR:		1.0000	

BODY PRESSURES (PSI)

z/d	theta:	20.8	35.8	50.8	65.8	80.8	95.8
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0.3760, 0.8791
0.3101, 0.6852
0.2833

3.5	0.2100	0.2275	0.2395	0.2428	0.2973	0.2689
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4.3	0.2149	0.2239	0.2209	0.2152	0.2921	0.2797
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4.8	0.2119	0.2162	0.2166	0.2012	0.2998	0.3012
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5.5	0.2208	0.2228	0.2290	0.2120	0.3128	0.3321
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6.5	0.2219	0.2233	0.2206	0.2060	0.3041	0.3404
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7.5	0.2260	0.2400	0.2252	0.2101	0.2835	0.3292
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WING PRESSURE. (PSI) .

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.2348*							
3.875	0.2136†							

4.125 0.1814

4.375 0.16761 0.2001

4.875 0.1975

0.123 0.3489
5 375 0 3331

5.625 0.4215, 0.3416

5.875 0.3394

0.123 0 3515

6.625 0.3471

6.875 **0.3395**

7.125	0.3416
7.275	0.2299

7.375	0.3399	0.3410	0.3491	0.3541	0.3425	0.2055	0.2115
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WHITE OAK LABORATORY

WTR1421
RUN 31

ALPH 14.94 deg PHI 21.03 deg
AVERAGED DATA

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSIN1(PR/10) PSIN2(TC/1)

P0 14.79 psia
SCALE FACTOR: 1.0000

TO 107.31 degF

MACH 3.0

WTR1421
RUN 31

z/d theta: 21.0

0.5	0.5855	36.0	51.0	66.0	81.0	96.0
1.0	0.4419					
1.5	0.3313	0.2807	0.2863	0.3035	0.3130	0.3117, 1.0708
2.0	0.2457					0.2615, 0.8413
2.5	0.2043	0.1912	0.1985	0.2019	0.2446	0.2532
3.0	0.1464					
3.5	0.1373	0.1564	0.1650	0.1442	0.2791	0.2810
4.0	0.1556	0.1636	0.1647	0.1425	0.2534	0.2383
4.3	0.1613	0.1640	0.1617	0.1481	0.2363	0.2428
4.5	0.1603	0.1564	0.1565	0.1448	0.2375	0.2479
4.8	0.1630	0.1593	0.1565	0.1493	0.2372	0.2521
5.0	0.1645	0.1630	0.1570	0.1582	0.2252	0.2633
5.5	0.1766	0.1767	0.1752	0.1693	0.2219	0.2731
6.0	0.1801	0.1828	0.1758	0.1729	0.2128	0.2655
6.5	0.1850	0.1840	0.1799	0.1729	0.1913	0.2550
7.0	0.1910	0.1909	0.1856	0.1766	0.1771	0.2406
7.5	0.1973	0.1966	0.1887	0.1799	0.1692	0.2259
8.0	0.2188	0.2591	0.2093	0.2483	0.1683	0.2122

BODY PRESSURES (PSI)

z/d r/d: 0.5935

3.625	0.2344*	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.875	0.2132*						
4.125	0.1569						
4.375	0.13941	0.1761					
4.625	0.1925	0.1700					
4.875	0.1607	0.1833					
5.125	0.3119	0.3336					
5.375	0.2957	0.2646	0.1686				
5.625	0.4911	0.3003	0.1500				
5.875	0.2863	0.3039	0.1637	0.1526			
6.125		0.3162	0.2127				
6.375	0.2884	0.3101	0.2893	0.1578	0.1531		
6.625	0.2772	0.3104	0.3276	0.1973	0.1609		
6.875	0.2635	0.3026	0.3334	0.2716	0.1514	0.1628	
7.125	0.2605	0.2855	0.3322	0.3293	0.1780	0.1613, 0.2703	
7.375	0.2544	0.2772	0.3050	0.3347	0.2287	0.1403	
		0.2651	0.2963	0.3271	0.2938	0.1450	0.1492

WING PRESSURES (PSI)

WHITE OAK LABORATORY									
TUNNEL 12 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	-0.09 deg	PHI	43.31 deg	PO	14.83 psia	TO	107.49 degf	MACH	3.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	43.3	58.3	73.3	88.3	103.3	118.3		
0.5		0.9225							
1.0		0.7306							
1.5		0.5811	0.5866	0.5891	0.5868	0.5849	0.5747, 0.5954		
2.0		0.4614					0.4529, 0.4582		
2.5		0.4097	0.4080	0.3984	0.3953	0.3922	0.3922		
3.0		0.3384							
3.5		0.3373	0.3374	0.3433	0.3418	0.3457	0.3463		
4.0		0.3498	0.3487	0.3488	0.3489	0.3503	0.3514		
4.3		0.3530	0.3526	0.3517	0.3536	0.3543	0.3541		
4.5		0.3594	0.3570	0.3607	0.3592	0.3577	0.3579		
4.8		0.3656	0.3633	0.3650	0.3662	0.3672	0.3650		
5.0		0.3710	0.3690	0.3683	0.3765	0.3689	0.3746		
5.5		0.3784	0.3778	0.3816	0.3788	0.3769	0.3812		
6.0		0.3820	0.3843	0.3830	0.3842	0.3835	0.3827		
6.5		0.3851	0.3863	0.3875	0.3881	0.3856	0.3906		
7.0		0.3879	0.3891	0.3913	0.3926	0.3917	0.3952		
7.5		0.3902	0.3911	0.3915	0.3921	0.3967	0.3963		
8.0		0.4060	0.4405	0.4105	0.4437	0.3741	0.3467		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.3849*							
3.875	0.3663†							
4.125	0.3602							
4.375	0.3531†	0.3768						
4.625	0.3668							
4.875	0.3680							
5.125	0.3908							
5.375	0.3732			0.3747				
5.625	0.3821, 0.3823			0.3764				
5.875	0.3763			0.3739	0.3557			
6.125				0.3789				
6.375	0.3945			0.3888	0.3949	0.3420		
6.625	0.3875			0.3955	0.3902	0.3639		
6.875	0.3858			0.3954	0.3949	0.3877	0.3409	
7.125	0.3890			0.3877	0.4005	0.4024	0.3348, 0.3586	
7.375	0.3876			0.3875	0.3896	0.3877	0.3719	
				0.3895	0.3887	0.3841	0.3829	0.3280

WHITE OAK LABORATORY

WTR1421
RUN 33

ALPH 4.95 deg PHI 43.6

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

43.64 deg PO 14.87 psia TO 107.59 degF MACH 3.0
AVERAGED DATA SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	58.6	73.6	88.6	103.6	118.6
0.5	0.7653					
1.0	0.6061					
1.5	0.4820					
2.0	0.3827	0.4721	0.4677	0.4679	0.4669	0.4675, 0.6706
2.5	0.3456	0.3400	0.3332	0.3321	0.3285	0.3725, 0.5146
3.0	0.2883					0.3285
3.5	0.2934	0.2983	0.3064	0.3034	0.2966	0.2808
4.0	0.3037	0.3073	0.3106	0.3095	0.2968	0.2656
4.3	0.3058	0.3099	0.3120	0.3155	0.3016	0.2646
4.5	0.3069	0.3085	0.3174	0.3182	0.3072	0.2800
4.8	0.3081	0.3099	0.3177	0.3244	0.3134	0.2920
5.0	0.3078	0.3094	0.3209	0.3325	0.3160	0.3020
5.5	0.3119	0.3238	0.3455	0.3361	0.3274	0.3203
6.0	0.3126	0.3353	0.3441	0.3421	0.3369	0.3308
6.5	0.3177	0.3336	0.3427	0.3458	0.3383	0.3425
7.0	0.3212	0.3335	0.3436	0.3484	0.3450	0.3501
7.5	0.3215	0.3321	0.3425	0.3462	0.3498	0.3503
8.0	0.3376	0.3744	0.3555	0.3904	0.3430	0.3717

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.2135*							
3.875	0.1919*							
4.125	0.1694							
4.375	0.1562	0.1887						
4.625	0.1928	0.1865						
4.875	0.1764	0.1840						
5.125	0.3224	0.3434						
5.375	0.3128	0.3030	0.1841					
5.625	0.3339	0.3254	0.1751					
5.875	0.3239	0.3294	0.1747	0.1742				
6.125		0.3326	0.2103	0.2180	0.1788			
6.375	0.3476	0.3465	0.2904	0.1780	0.1917			
6.625	0.3446	0.3497	0.3400	0.1766	0.1861			
6.875	0.3427	0.3422	0.3545	0.2131	0.1979	0.1992, 0.1906		
7.125	0.3481	0.3430	0.3597	0.2828	0.1786	0.1826		
7.375	0.3580	0.3432	0.3453	0.3298	0.1635	0.1748	0.1918	
			0.3477	0.3470	0.1917			

WHITE OAK LABORATORY

WIR1421
RUN 34

ALPHI 9.96 deg PHII 43.7 deg

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)

43.72 deg 58.7 73.7 88.7 103.7 118.7

AVERAGED DATA

P0 14.90 psia

SCALE FACTOR: 1.0000

TO 107.88 degF

MACH 3.0

BODY PRESSURES (PSI)

z/d	theta:	58.7	73.7	88.7	103.7	118.7
0.5	0.6163					
1.0	0.4793					
1.5	0.3770					
2.0	0.2987	0.3755	0.3799	0.3824	0.3790	0.3730, 0.7449
2.5	0.2722	0.2799	0.2838	0.2898	0.2794	0.3015, 0.5725
3.0	0.2288					0.2698
3.5	0.2291	0.2338	0.2598	0.2925	0.2550	0.2219
4.0	0.2255	0.2207	0.2636	0.2982	0.2707	0.1809
4.3	0.2224	0.2105	0.2870	0.3023	0.2760	0.1688
4.5	0.2162	0.1945	0.3035	0.3028	0.2818	0.1768
4.8	0.2149	0.1927	0.3133	0.3054	0.2788	0.1900
5.0	0.2121	0.1975	0.2984	0.3049	0.2679	0.2113
5.5	0.2219	0.2118	0.2940	0.2946	0.2585	0.2417
6.0	0.2236	0.2146	0.2665	0.2867	0.2625	0.2739
6.5	0.2216	0.2138	0.2442	0.2799	0.2747	0.2931
7.0	0.2214	0.2198	0.2257	0.2801	0.2862	0.3049
7.5	0.2200	0.2227	0.2203	0.2786	0.2950	0.3056
8.0	0.2380	0.2779	0.2362	0.2745	0.3312	0.3668

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.1327*							
3.875	0.1100+							
4.125	0.0897							
4.375	0.07961	0.1099						
4.625	0.1170							
4.875	0.1149							
5.125	0.2401							
5.375	0.2541							
5.625	0.2705	0.2960						
5.875	0.3125				0.1135			
6.125					0.1232	0.1127		
6.375	0.3201				0.1157	0.1300		
6.625	0.3116				0.1279	0.1286		
6.875	0.3045				0.1561	0.1291	0.1284	
7.125	0.3087				0.1889	0.1073	0.1322, 0.1451	
7.375	0.3133				0.2299	0.1142	0.1209	
					0.2942		0.1274	0.1256

WHITE OAK LABORATORY

WTR1421
RUN 35

ALPH 14.93 deg PHI 43.72 deg
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

TUNNEL 12 PRESSURE TEST

PO 14.91 psia
SCALE FACTOR: 1.0000

TO 107.66 degF

MACH 3.0

WTR1421
RUN 35

BODY PRESSURES (PSI)

z/d	theta:	58.7	73.7	88.7	103.7	118.7
0.5	0.4657					
1.0	0.3544					
1.5	0.2705					
2.0	0.2220					
2.5	0.2055	0.2954	0.3097	0.3245	0.3087	0.2950, 0.8334
3.0	0.1624	0.2081	0.2070	0.2688	0.2102	0.2357, 0.6420
3.5	0.1571					0.2072
4.0	0.1585	0.1393	0.1778	0.2647	0.2173	0.1615
4.3	0.1537	0.1369	0.1791	0.2499	0.1998	0.0953
4.5	0.1462	0.1442	0.1806	0.2469	0.1985	0.0967
4.8	0.1509	0.1385	0.1652	0.2385	0.1925	0.1080
5.0	0.1581	0.1429	0.1649	0.2422	0.1860	0.1115
5.5	0.1780	0.1514	0.1624	0.2503	0.1797	0.1314
6.0	0.1819	0.1719	0.1730	0.2353	0.1899	0.1692
6.5	0.1835	0.1734	0.1707	0.2133	0.1879	0.1935
7.0	0.1841	0.1781	0.1736	0.2003	0.1990	0.2059
7.5	0.1775	0.1781	0.1773	0.1927	0.2027	0.2072
8.0	0.1914	0.2327	0.1812	0.1915	0.2114	0.2132
			0.2051	0.2442	0.2557	0.2680

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.1635*							
3.875	0.1416*							
4.125	0.0987							
4.375	0.07761	0.1189						
4.625	0.1237							
4.875	0.0952							
5.125	0.1937							
5.375	0.1858							
5.625	0.2121, 0.2015							
5.875	0.1990							
6.125								
6.375	0.2402							
6.625	0.2403							
6.875	0.2385							
7.125	0.2405							
7.375	0.2378							
		0.1096						
		0.1145						
		0.2169						
		0.1493						
		0.1755						
		0.1983						
		0.2163						
		0.2432						
		0.2584						
		0.2549						
		0.2562						
		0.2550						
			0.1032					
			0.0874					
			0.0806					
			0.0928					
			0.1174					
			0.0838					
			0.0815					
			0.1753					
			0.1126					
			0.1346					
			0.1717					
				0.0764				
				0.0926				
				0.0906				
				0.0896				
				0.0720				
				0.0841				
					0.0895			
					0.0923, 0.1311			
					0.0806			
					0.0896			
						0.0869		

WHITE OAK LABORATORY									
TUNNEL 12 PRESSURE TEST					WTR1421				
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)					RUN 36				
ALPH	-0.06 deg	PHI	65.59 deg	P0	14.91 psia	TO	107.40 degF	MACH	3.0
AVERAGED DATA					SCALE FACTOR: 1.0000				
BODY PRESSURES (PSI)									
z/d	theta:	65.6	80.6	95.6	110.6	125.6	140.6		
0.5		0.9193							
1.0		0.7276							
1.5		0.5779							
2.0		0.4597	0.5858	0.5889	0.5876	0.5854	0.5772, 0.5973		
2.5		0.4098	0.4063	0.3985	0.3962	0.3928	0.4552, 0.4579		
3.0		0.3363					0.3954		
3.5		0.3373	0.3376	0.3424	0.3410	0.3461	0.3462		
4.0		0.3498	0.3485	0.3487	0.3490	0.3499	0.3515		
4.3		0.3531	0.3525	0.3521	0.3527	0.3543	0.3522		
4.5		0.3595	0.3566	0.3609	0.3587	0.3579	0.3580		
4.8		0.3656	0.3629	0.3666	0.3666	0.3684	0.3639		
5.0		0.3710	0.3707	0.3702	0.3786	0.3679	0.3770		
5.5		0.3786	0.3783	0.3811	0.3788	0.3767	0.3815		
6.0		0.3826	0.3845	0.3832	0.3838	0.3829	0.3826		
6.5		0.3859	0.3846	0.3872	0.3876	0.3861	0.3928		
7.0		0.3883	0.3899	0.3904	0.3910	0.3905	0.3934		
7.5		0.3912	0.3916	0.3931	0.3897	0.3933	0.3911		
8.0		0.4064	0.4411	0.4109	0.4445	0.3715	0.3473		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.3802*							
3.875	0.3616+							
4.125	0.3541							
4.375	0.34671							
4.625	0.3844							
4.875	0.3561							
5.125	0.3915							
5.375	0.3740							
5.625	0.3804, 0.3821							
5.875	0.3737				0.3447			
6.125								
6.375	0.3951				0.3918	0.3238		
6.625	0.3875				0.3910	0.3458		
6.875	0.3841				0.4006	0.3746	0.3293	
7.125	0.3856				0.3920	0.4049	0.3266, 0.3378	
7.375	0.3917				0.3857	0.3856	0.3392	
					0.3862	0.3807	0.3763	0.3169

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	4.95 deg	PHI	65.84 deg	P0	14.90 psia	TO	107.40 degf	MACH	3.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	65.8	80.8	95.8	110.8	125.8	140.8		
0.5	0.7271								
1.0	0.5773								
1.5	0.4614		0.4647	0.4665	0.4684	0.4790	0.4880, 0.6037		
2.0	0.3725						0.3848, 0.4625		
2.5	0.3408		0.3393	0.3337	0.3306	0.3284	0.3345		
3.0	0.2920								
3.5	0.3002		0.3029	0.3078	0.2997	0.2903	0.2729		
4.0	0.3104		0.3138	0.3118	0.2991	0.2816	0.2568		
4.3	0.3120		0.3175	0.3149	0.3009	0.2767	0.2592		
4.5	0.3131		0.3201	0.3241	0.3032	0.2751	0.2579		
4.8	0.3152		0.3276	0.3309	0.3128	0.2843	0.2576		
5.0	0.3200		0.3358	0.3365	0.3243	0.2899	0.2701		
5.5	0.3413		0.3514	0.3524	0.3287	0.3022	0.2924		
6.0	0.3460		0.3509	0.3430	0.3325	0.3133	0.3008		
6.5	0.3417		0.3415	0.3374	0.3327	0.3186	0.3198		
7.0	0.3312		0.3365	0.3362	0.3360	0.3233	0.3268		
7.5	0.3291		0.3340	0.3348	0.3281	0.3273	0.3277		
8.0	0.3413		0.3779	0.3488	0.3840	0.3294	0.3675		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.1563*							
3.875	0.1344+							
4.125	0.1252							
4.375	0.11261	0.1436						
4.625	0.1483							
4.875	0.1475	0.1389						
5.125	0.2897	0.3116						
5.375	0.2790	0.1893						
5.625	0.2965	0.2459	0.1552					
5.875	0.2906	0.2774	0.1419	0.1396				
6.125		0.2940	0.1319					
6.375	0.3233	0.2940	0.1392	0.1487	0.1413			
6.625	0.3208	0.3147	0.1821	0.1419	0.1562			
6.875	0.3188	0.3220	0.2436	0.1454	0.1529	0.1591		
7.125	0.3246	0.3181	0.2925	0.1386	0.1522	0.1625, 0.1530		
7.375	0.3235	0.3208	0.3067	0.1527	0.1317	0.1465		
		0.3220	0.3201	0.1965	0.1283	0.1446	0.1529	

WHITE OAK LABORATORY			
TUNNEL T2 PRESSURE TEST		PSI#2(TC/1)	
PSI CONFIGURATION PSI#1(PR/10)		PSI#2(TC/1)	
WTR1421 RUN 38	9.94 deg	PII	65.74 deg AVERAGED DATA
ALPI	PO	14.91 psia	TO 107.46 degF
		SCALE FACTOR:	1.0000
		MACH	3.0
		WTR1421 RUN 38	

z/d	theta:	BODY PRESSURES (PSI)					
		65.7	80.7	95.7	110.7	125.7	140.7
0.5	0.5679						
1.0	0.4565						
1.5	0.3687						
2.0	0.3051		0.3778	0.3799	0.3762	0.3767	0.3843, 0.5902
2.5	0.2869		0.2938	0.2875	0.2749	0.2619	0.2975, 0.4455
3.0	0.2423						0.2532
3.5	0.2342		0.2874	0.2919	0.2348	0.2118	0.2001
4.0	0.2196		0.3101	0.3049	0.2202	0.2011	0.1686
4.3	0.2088		0.3155	0.3066	0.2295	0.2009	0.1528
4.5	0.1954		0.3150	0.3089	0.2391	0.2051	0.1381
4.8	0.2067		0.3197	0.3140	0.2510	0.1999	0.1358
5.0	0.2415		0.3213	0.3127	0.2597	0.1883	0.1409
5.5	0.2403		0.3205	0.3140	0.2655	0.1855	0.1743
6.0	0.2382		0.3060	0.2982	0.2720	0.1993	0.1891
6.5	0.2341		0.2903	0.2893	0.2689	0.2080	0.2042
7.0	0.2343		0.2801	0.2811	0.2612	0.2136	0.2167
7.5	0.2420		0.2753	0.2723	0.2446	0.2174	0.2428
8.0	0.2639		0.3031	0.2802	0.3169	0.2982	0.3410

z/d	$r/d:$	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.0912*							
3.875	0.0679†							
4.125	0.0489							
4.375	0.03431	0.0692						
4.625	0.0680							
4.875	0.0626							
5.125	0.1896							
5.375	0.1980			0.0710				
5.625	0.1516,	0.2036		0.0702				
5.875	0.1981			0.0643	0.0673			
6.125				0.0674				
6.375	0.2291		0.1390	0.0771	0.0872	0.0726		
6.625	0.2307		0.1589	0.0929	0.0894	0.0959		
6.875	0.2325		0.1739	0.1056	0.0986	0.0953		
7.125	0.2462		0.1752	0.1189	0.0905	0.0965	0.0950	
7.375	0.2653		0.2100	0.1218	0.0846	0.0845	0.0972, 0.0849	
				0.1439	0.0949	0.0954	0.0853	0.0951

WTR1421
RUN 39

WTR1421
RUN 39

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/IO) PSI#2(IC/1)

WTR1421
RUN 39

ALPH	14.98 deg	PHI	66.04 deg	P0	14.72 psia	T0	107.23 degf	MACH	3.0
					AVERAGED DATA				
					SCALE FACTOR:		1.0000		

BODY PRESSURES (PSI)

z/d	theta:	66.0	81.0	96.0	111.0	126.0	141.0
0.5		0.4449					
1.0		0.3566					
1.5		0.2871					
2.0		0.2385	0.3078	0.3119	0.3000	0.2817	0.2683, 0.5739
2.5		0.2106	0.2562	0.2520	0.1972	0.1903	0.2020, 0.4257
3.0		0.1467					0.1831
3.5		0.1300	0.2564	0.2506	0.1844	0.1472	0.0532
4.0		0.1245	0.2434	0.2360	0.1721	0.1774	0.0190
4.3		0.1275	0.2398	0.2475	0.1668	0.1634	0.0195
4.5		0.1289	0.2311	0.2382	0.1488	0.1383	0.0286
4.8		0.1346	0.2250	0.2357	0.1455	0.1059	0.0265
5.0		0.1472	0.2212	0.2272	0.1525	0.0813	0.0496
5.5		0.1847	0.2217	0.2297	0.1485	0.0843	0.0885
6.0		0.1956	0.2116	0.2282	0.1520	0.0797	0.0892
6.5		0.2028	0.2121	0.2319	0.1568	0.0907	0.0996
7.0		0.2082	0.2144	0.2258	0.1062	0.1193	0.1193
7.5		0.2064	0.2092	0.2186	0.1616	0.1332	0.1291
8.0		0.2142	0.2550	0.2342	0.2726	0.2365	0.2229

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.0746*							
3.875	0.0511+							
4.125	0.0356							
4.375	0.02451	0.0565						
4.625	0.0808		0.0576					
4.875	0.0549		0.0712					
5.125	0.1139		0.1387	0.0631				
5.375	0.0892		0.0959	0.0603				
5.625	0.0817, 0.0971		0.1074	0.0583	0.0617			
5.875	0.0835		0.1189	0.0676				
6.125			0.1209	0.0842	0.0746	0.0638		
6.375	0.1031		0.1333	0.0902	0.0703	0.0807		
6.625	0.0987		0.1352	0.1021	0.0808	0.0774	0.0760	
6.875	0.1013		0.1163	0.1179	0.0749	0.0778	0.0771, 0.0537	
7.125	0.1169		0.1169	0.1132	0.0741	0.0593	0.0647	
7.375	0.1252		0.1274	0.1265	0.0907	0.0685	0.0760	0.0730

WHITE OAK LABORATORY

WTR1421
RUN 41

ALPH 4.96 deg PHI 88.62 deg
AVERAGED DATA

TUNNEL Y2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

PO 14.62 psi
SCALE FACTOR: 1.0000

TO 107.15 degF

MACH 3.0

WTR1421
RUN 41

z/d	theta:	103.6	118.6	133.6	148.6	163.6
0.5	0.6977					
1.0	0.5533					
1.5	0.4454					
2.0	0.3616	0.4529	0.4610	0.4753	0.4927	0.5158, 0.5307
2.5	0.3352	0.3321	0.3227	0.3229	0.3272	0.4032, 0.4044
3.0	0.2876					0.3458
3.5	0.2978	0.2963	0.2972	0.2878	0.2790	0.2642
4.0	0.3099	0.3049	0.2971	0.2877	0.2746	0.2514
4.3	0.3143	0.3080	0.2955	0.2858	0.2694	0.2498
4.5	0.3203	0.3096	0.2980	0.2811	0.2636	0.2500
4.8	0.3304	0.3199	0.2995	0.2808	0.2602	0.2486
5.0	0.3400	0.3312	0.3050	0.2870	0.2588	0.2551
5.5	0.3514	0.3454	0.3313	0.2999	0.2743	0.2670
6.0	0.3471	0.3447	0.3285	0.3092	0.2914	0.2825
6.5	0.3386	0.3337	0.3261	0.3233	0.3030	0.2963
7.0	0.3289	0.3335	0.3252	0.3162	0.3035	0.3035
7.5	0.3248	0.3252	0.3209	0.3109	0.3086	0.3076
8.0	0.3356	0.3723	0.3336	0.3690	0.3151	0.3521

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.1480*							
3.875	0.1259+							
4.125	0.1148							
4.375	0.10381	0.1344						
4.625	0.1367							
4.875	0.1375	0.1351						
5.125	0.2860	0.1275						
5.375	0.2601	0.2885						
5.625	0.2684, 0.2764	0.1137						
5.875	0.2779	0.1548		0.1262				
6.125		0.1191						
6.375	0.2986	0.1228		0.1392	0.1211			
6.625	0.2926	0.2735		0.1297	0.1379			
6.875	0.2889	0.2851		0.1400	0.1438 ^W			
7.125	0.2971	0.2797		0.1333	0.1444	0.1352	0.1381, 0.1324	
7.375	0.3059	0.2878		0.1212	0.1219	0.1257	0.1271	
		0.2933		0.1216	0.1230	0.1263		

WHITE OAK LABORATORY

WTR1421
RUN 42

ALPH 9.95 deg PHI 88.42 deg
AVERAGED DATA

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

WTR1421
RUN 42

P0 14.62 psia
SCALE FACTOR: 1.0000

MACH 3.0

z/d	theta:	103.4	118.4	133.4	148.4	163.4
0.5	0.5565					
1.0	0.4474					
1.5	0.3654					
2.0	0.3072	0.3690	0.3689	0.3740	0.3954	0.4419, 0.4575
2.5	0.2934	0.2830	0.2667	0.2531	0.2462	0.3352, 0.3390
3.0	0.2586					0.2760
3.5	0.2834	0.2565	0.2271	0.2126	0.2082	0.1868
4.0	0.3094	0.2865	0.2036	0.2033	0.1943	0.1683
4.3	0.3139	0.3099	0.1905	0.2019	0.1899	0.1559
4.5	0.3175	0.3204	0.1700	0.1905	0.1914	0.1409
4.8	0.3249	0.3184	0.1688	0.1967	0.1889	0.1230
5.0	0.3279	0.3230	0.1841	0.2032	0.1794	0.1135
5.5	0.3199	0.3124	0.2408	0.2318	0.1963	0.1205
6.0	0.3028	0.2982	0.2421	0.2485	0.2049	0.1236
6.5	0.2938	0.2867	0.2472	0.2487	0.1942	0.1460
7.0	0.2910	0.2886	0.2386	0.2317	0.1943	0.1678
7.5	0.2853	0.2786	0.2402	0.2155	0.1975	0.1961
8.0	0.2952	0.3333	0.2589	0.2962	0.2601	0.3001

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.0856*							
3.875	0.0625+							
4.125	0.0471							
4.375	0.0368	0.0676						
4.625	0.0694							
4.875	0.0599							
5.125	0.1207							
5.375	0.1086							
5.625	0.1218	0.1127						
5.875	0.1138				0.0574			
6.125					0.0632	0.0552		
6.375	0.1753				0.0703	0.0808		
6.625	0.1871				0.0810	0.0772**	0.0760	
6.875	0.1801				0.0733	0.0782	0.0806, 0.0657	
7.125	0.1830				0.0689	0.0635	0.0584	
7.375	0.1915				0.0793	0.0715	0.0787	0.0824

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	14.94 deg	PHI	88.48 deg	PO	14.64 psia	TO	107.18 deg	MACH	3.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	88.5	103.5	118.5	133.5	148.5	163.5		
0.5		0.4519							
1.0		0.3677							
1.5		0.3063							
2.0		0.2681	0.2998	0.2913	0.2733	0.2856	0.3621, 0.3791		
2.5		0.2754	0.2104	0.1944	0.1870	0.1631	0.2673, 0.2696		
3.0		0.2468					0.2138		
3.5		0.2667	0.1919	0.1372	0.1484	0.1411	0.1657		
4.0		0.2486	0.1967	0.1257	0.1493	0.1565	0.0436		
4.3		0.2475	0.1930	0.1284	0.1544	0.1524	0.0293		
4.5		0.2459	0.1835	0.1377	0.1391	0.1376	0.0220		
4		.2561	0.1853	0.1531	0.1412	0.1193	0.0071		
5.0		.2542	0.1894	0.1610	0.1524	0.1041	0.0251		
5.5		.2396	0.1940	0.1822	0.1675	0.1151	0.0435		
6.0		.2287	0.1961	0.1768	0.1728	0.1016	0.0555		
6.5		.2309	0.1991	0.1630	0.1602	0.0996	0.0748		
7.0		0.2393	0.2084	0.1426	0.1367	0.0987	0.0818		
7.5		0.2450	0.2055	0.1252	0.1083	0.0999	0.1020		
8.0		0.2600	0.2992	0.1837	0.2234	0.1773	0.1539		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	0.0702*								
3.875	0.0468+								
4.125	0.0279								
4.375	0.01361	0.0489							
4.625	0.0450								
4.875	0.0334								
5.125	0.0499								
5.375	0.0443								
5.625	0.0924, 0.0563								
5.875	0.0706				0.0291				
6.125					0.0478	0.0350			
6.375	0.0884				0.0531	0.0602			
6.625	0.0798				0.0653	0.0595	0.0588		
6.875	0.0740				0.0584	0.0643	0.0621, 0.0519		
7.125	0.0827				0.0532	0.0493	0.0508		
7.375	0.1003				0.0651	0.0580	0.0614	0.0680	

WHITE OAK LABORATORY										
TUNNEL T2 PRESSURE TEST										
PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)										
WTR1421 RUN 44	ALPH	-0.08 deg	PIII	111.30 deg AVERAGED DATA	PO	14.69 psia SCALE FACTOR:	TO	107.28 degF	MACH	WTR1421 RUN 44
							1.0000			3.0
BODY PRESSURES (PSI)										
	z/d	theta:	111.3	126.3	141.3	156.3	171.3	186.3		
	0.5		0.8947							
	1.0		0.7090							
	1.5		0.5632							
	2.0		0.4480							
	2.5		0.4000							
	3.0		0.3277							
	3.5		0.3305							
	4.0		0.3428							
	4.3		0.3461							
	4.5		0.3529							
	4.8		0.3581							
	5.0		0.3634							
	5.5		0.3707							
	6.0		0.3747							
	6.5		0.3802							
	7.0		0.3827							
	7.5		0.3823							
	8.0		0.3965							

WHITE OAK LABORATORY

WTR1421
RUN 45

ALPH 4.93 deg PHI 111.3

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

111.33 deg PO 14.71 psia TO 107.25 degF MACH 3.0
AVERAGED DATA SCALE FACTOR: 1.0000

z/d theta: 111.3

0.5	0.7082	126.3	141.3	156.3	171.3	186.3
1.0	0.5613					
1.5	0.4504	0.4667	0.4853	0.5089	0.5430	0.5769, 0.4906
2.0	0.3642					0.4507, 0.3765
2.5	0.3345	0.3322	0.3295	0.3390	0.3555	0.3840
3.0	0.2862					
3.5	0.2958	0.2925	0.2930	0.2856	0.2879	0.2895
4.0	0.3059	0.3000	0.2941	0.2853	0.2783	0.2697
4.3	0.3062	0.3003	0.2934	0.2854	0.2748	0.2656
4.5	0.3086	0.2964	0.2956	0.2842	0.2733	0.2671
4.8	0.3143	0.2969	0.2934	0.2851	0.2765	0.2667
5.0	0.3237	0.2993	0.2892	0.2909	0.2737	0.2736
5.5	0.3442	0.3154	0.2961	0.2861	0.2805	0.2821
6.0	0.3421	0.3280	0.3060	0.2938	0.2915	0.2922
6.5	0.3375	0.3363	0.3233	0.3105	0.2988	0.3002
7.0	0.3310	0.3245	0.3207	0.3148	0.3023	0.3000
7.5	0.3225	0.3204	0.3192	0.3106	0.3097	0.3057
8.0	0.3340	0.3710	0.3319	0.3673	0.3134	0.3444

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.1743*							
3.875	0.1527*							
4.125	0.1380							
4.375	0.12831							
4.625	0.1536							
4.875	0.1520							
5.125	0.2906							
5.375	0.2810							
5.625	0.2771, 0.2907							
5.875	0.2833				0.1385			
6.125			0.2065	0.1402	0.1556	0.1325		
6.375	0.3061		0.2329	0.1487	0.1540	0.1489		
6.625	0.2938		0.2616	0.1541	0.1540	0.1489		
6.875	0.2862		0.2796	0.1559	0.1644	0.1493	0.1465	
7.125	0.2923		0.2754	0.1669	0.1591	0.1559	0.1493, 0.1434	
7.375	0.2963		0.2814	0.1676	0.1492	0.1404	0.1346	
			0.2874	0.1900	0.1496	0.1417	0.1340	0.1358

WHITE OAK LABORATORY

WIR1421
RUN 46

ALPH 9.94 deg

PIII 111.1

111.11 deg

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

TUNNEL T2 PRESSURE TEST

PO 14.75 psia

SCALE FACTOR: 1.0000

TO 107.55 degf

MACH 3.0

WTR1421
RUN 46

z/d

theta:

0.5

1.0

1.5

2.0

2.5

3.0

3.5

4.0

4.3

4.5

4.8

5.0

5.5

6.0

6.5

7.0

7.5

8.0

126.1

0.3686

0.2680

0.2218

0.2070

0.1995

0.1845

0.1794

0.1847

0.2090

0.2247

0.2367

0.2466

0.2531

0.2982

141.1

0.3843

0.2495

0.2210

0.2125

0.2108

0.2057

0.2044

0.2048

0.2296

0.2357

0.2397

0.2415

0.2540

0.2740

156.1

0.4209

0.2582

0.2039

0.2032

0.2058

0.2033

0.2104

0.2219

0.2282

0.2401

0.2394

0.2355

0.2388

0.3112

171.1

0.4853

0.2965

0.2068

0.1895

0.1923

0.2004

0.2062

0.2075

0.2247

0.2443

0.2319

0.2257

0.2256

0.2832

186.1

0.5657, 0.3891

0.4344, 0.2891

0.3618

0.2449

0.2228

0.2131

0.2090

0.1984

0.1932

0.1814

0.1884

0.1771

0.1802

0.2019

0.2840

WING PRESSURES (PSI)

z/d

r/d:

3.625 0.1148

3.875 0.0921

4.125 0.0750

4.375 0.0617

4.625 0.0951

4.875 0.0847

5.125 0.1274

5.375 0.1156

5.625 0.1992

5.875 0.1294

6.125 0.1316

6.375 0.1620

6.625 0.1698

6.875 0.1656

7.125 0.1644

7.375 0.1675

0.7185

0.8435

0.9685

1.0935

1.2185

1.3435

0.0940

0.0856

0.1518

0.0707

0.0690

0.0705

0.0582

0.0554

0.0747

0.0864

0.0668

0.0777

0.0935

0.0931

0.0822

0.0690

0.0788

0.0899

0.0870

0.0959

0.0813

0.0688

0.0829

0.0741

0.0937

0.0922

0.0939

0.0764

0.0814

0.0876

0.0896, 0.0762

0.0750

0.0821

0.0836

WHITE OAK LABORATORY

WTR1421
RUN 47

WTR1421
RUN 47

ALPH	14.97 deg	PHI	112.51 deg	P0	14.84 psia	T0	107.08 degF	MACH	3.0
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112.51 deg
AVERAGED DATA

PO 14.84 psia
SCALE FACTOR

7.08 degF

BODY PRESSURES (PSI)

theta:	112.5	127.5	142.5	157.5	172.5	187.5
z/d						
0.5	0.4475					
1.0	0.3591					
1.5	0.2893					
2.0	0.2387	0.2830	0.2730	0.3243	0.4254	0.5557, 0.2774
2.5	0.2079	0.1997	0.1816	0.1781	0.2474	0.4260, 0.1957
3.0	0.1451					0.3524
3.5	0.1257	0.1458	0.1532	0.1383	0.1700	0.2305
4.0	0.1206	0.1277	0.1531	0.1516	0.1497	0.1982
4.5	0.1247	0.1327	0.1438	0.1567	0.1586	0.1709
4.8	0.1247	0.1302	0.1422	0.1535	0.1671	0.1466
5.0	0.1295	0.1372	0.1566	0.1599	0.1675	0.1273
5.5	0.1436	0.1522	0.1693	0.1777	0.1623	0.1137
6.0	0.1839	0.1867	0.1910	0.1863	0.1745	0.0974
6.5	0.1986	0.1989	0.1929	0.1944	0.1862	0.0891
7.0	0.2114	0.2082	0.1941	0.1888	0.1658	0.0745
7.5	0.2156	0.2198	0.1922	0.1779	0.1486	0.0727
8.0	0.2107	0.2183	0.2022	0.1799	0.1561	0.0946
	0.2197	0.2602	0.2192	0.2578	0.2451	0.1897

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.0966*							
3.875	0.0736+							
4.125	0.0485							
4.375	0.03541	0.0693						
4.625	0.0649		0.0684					
4.875	0.0588		0.0550					
5.125	0.0901		0.1153	0.0674				
5.375	0.0695		0.0462	0.0569				
5.625	0.0810	0.0757	0.0449	0.0447	0.0523			
5.875	0.0691		0.0358	0.0456				
6.125			0.0340	0.0490	0.0623	0.0467		
6.375	0.0934		0.0561	0.0563	0.0599	0.0679		
6.625	0.0796		0.0653	0.0612	0.0595	0.0653	0.0616	
6.875	0.0705		0.0459	0.0635	0.0595	0.0671	0.0639	0.0626
7.125	0.0805		0.0526	0.0487	0.0531	0.0501	0.0575	
7.375	0.0905		0.0631	0.0622	0.0568	0.0624	0.0682	0.0640

[illegible]

WHITE OAK LABORATORY

WTR1421
RUN 49WTR1421
RUN 49TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH	4.92 deg	PHI	134.13 deg	PO	14.88 psia	TO	107.67 degf	MACH	3.0
			AVERAGED DATA		SCALE FACTOR:	1.0000			

BODY PRESSURES (PSI)

z/d	theta:	134.1	149.1	164.1	179.1	194.1	209.1
0.5	0.7498						
1.0	0.5913						
1.5	0.4700						
2.0	0.3775		0.4987	0.5313	0.5678	0.6109	0.6496, 0.4729
2.5	0.3407		0.3439	0.3514	0.3725	0.3975	0.5072, 0.3647
3.0	0.2844						0.4341
3.5	0.2943		0.2901	0.2953	0.3019	0.3212	0.3324
4.0	0.3046		0.2985	0.2933	0.2971	0.3091	0.3169
4.3	0.3044		0.2995	0.2939	0.2947	0.3031	0.3102
4.5	0.3058		0.2973	0.2958	0.2928	0.3011	0.3102
4.8	0.3055		0.2997	0.2989	0.2957	0.3036	0.3061
5.0	0.3058		0.3034	0.2975	0.3049	0.2983	0.3173
5.5	0.3104		0.3056	0.3044	0.3018	0.3077	0.3205
6.0	0.3146		0.3088	0.3044	0.3056	0.3144	0.3215
6.5	0.3249		0.3080	0.3048	0.3103	0.3227	0.3384
7.0	0.3186		0.3107	0.3018	0.3055	0.3173	0.3333
7.5	0.3194		0.3151	0.3140	0.3086	0.3199	0.3242
8.0	0.3378		0.3745	0.3307	0.3663	0.3187	0.3506

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.2283*							
3.875	0.2071+							
4.125	0.1924							
4.375	0.18071							
4.625	0.2004							
4.875	0.1939		0.2107					
5.125	0.3409		0.1913					
5.375	0.3198		0.3619					
5.625	0.3113, 0.3245		0.1923	0.2012				
5.875	0.3131		0.2369	0.1930	0.1788			
6.125			0.2695	0.1886				
6.375	0.3450		0.2958	0.2005	0.1927	0.1750		
6.625	0.3372		0.3238	0.2202	0.1916	0.1923		
6.875	0.3232		0.3214	0.2143	0.2067	0.1914	0.1864	
7.125	0.3217		0.3138	0.2378	0.2042	0.1929	0.1886, 0.1780	
7.375	0.3273		0.3226	0.2329	0.1990	0.1754	0.1731	
			0.3235	0.2483	0.2073	0.1774	0.1695	0.1694

WHITE OAK LABORATORY

WTR1421
RUN 51WTR1421
RUN 51

ALPH 14.93 deg PHI 134.18 deg
TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)
PO 14.90 psia TO 107.88 degF
AVERAGED DATA SCALE FACTOR: 1.0000 MACH 3.0

BODY PRESSURES (PSI)

z/d	theta:	149.2	164.2	179.2	194.2	209.2
0.5	0.4591					
1.0	0.3451					
1.5	0.2640					
2.0	0.2218	0.2925	0.3733	0.4938	0.6410	0.8030, 0.2982
2.5	0.2029	0.1751	0.2092	0.2946	0.3995	0.6305, 0.2225
3.0	0.1575					0.5343
3.5	0.1583	0.1539	0.1416	0.2018	0.2915	0.3711
4.0	0.1587	0.1603	0.1423	0.1816	0.2662	0.3571
4.3	0.1520	0.1589	0.1487	0.1755	0.2676	0.3449
4.5	0.1448	0.1464	0.1469	0.1702	0.2737	0.3438
4.8	0.1489	0.1513	0.1524	0.1776	0.2833	0.3293
5.0	0.1566	0.1611	0.1538	0.1966	0.2814	0.3225
5.5	0.1790	0.1786	0.1712	0.2079	0.3023	0.2859
6.0	0.1860	0.1877	0.1811	0.2185	0.3100	0.2576
6.5	0.1927	0.1889	0.1817	0.2334	0.3100	0.2383
7.0	0.1912	0.1903	0.1760	0.2360	0.2946	0.2119
7.5	0.1852	0.1869	0.1844	0.2395	0.2926	0.2262
8.0	0.1935	0.2341	0.1975	0.2368	0.3506	0.3709

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.1714+							
3.875	0.1494+							
4.125	0.1280							
4.375	0.10931	0.1406						
4.625	0.1442	0.1351						
4.875	0.1475	0.2099						
5.125	0.1863	0.1554						
5.375	0.1717	0.1496						
5.625	0.1752, 0.1828	0.1358	0.1384					
5.875	0.1804	0.1234						
6.125		0.1025	0.1284	0.1490	0.1282			
6.375	0.2051	0.1169	0.1258	0.1385	0.1421			
6.625	0.1949	0.1126	0.1253	0.1495	0.1379			
6.875	0.1790	0.0942	0.1304	0.1407	0.1353	0.1334	0.1332, 0.0705	
7.125	0.1848	0.0939	0.1076	0.1338	0.1122	0.1176	0.1241	0.1301
7.375	0.1939	0.1086	0.1276	0.1335	0.1134			

WTR1421	WHITE OAK LABORATORY	TUNNEL T2 PRESSURE TEST	WTR1421
RUN 52		PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)	RUN 52
ALPH	-0.05 deg	PHI 156.65 deg	MACH 3.0
		AVERAGED DATA	
		P0 14.89 psia	
		SCALE FACTOR: 1.0000	
		107.94 degf	

z/d	theta:	BODY PRESSURES (PSI)					
		156.6	171.6	186.6	201.6	216.6	231.6
0.5	0.9027						
1.0	0.7141						
1.5	0.5650		0.5796	0.5863	0.5887	0.5891	0.5849, 0.5849
2.0	0.4549						0.4596, 0.4439
2.5	0.4053		0.4022	0.3965	0.3961	0.3942	0.4004
3.0	0.3289						
3.5	0.3357		0.3354	0.3404	0.3384	0.3418	0.3446
4.0	0.3483		0.3465	0.3479	0.3479	0.3489	0.3515
4.3	0.3501		0.3499	0.3514	0.3492	0.3542	0.3490
4.5	0.3573		0.3527	0.3583	0.3554	0.3557	0.3553
4.8	0.3624		0.3601	0.3678	0.3639	0.3678	0.3584
5.0	0.3680		0.3708	0.3709	0.3803	0.3627	0.3755
5.5	0.3736		0.3745	0.3751	0.3751	0.3734	0.3795
6.0	0.3797		0.3805	0.3800	0.3798	0.3775	0.3775
6.5	0.3871		0.3813	0.3846	0.3858	0.3904	0.3846
7.0	0.3855		0.3857	0.3792	0.3770	0.3785	0.3919
7.5	0.3847		0.3855	0.3899	0.3797	0.3900	0.3847
8.0	0.3980		0.4327	0.4056	0.4391	0.3682	0.3506

z/d		r/d:		WING PRESSURES (PSI)					
		0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	0.3692*								
3.875	0.3504†								
4.125	0.3383								
4.375	0.3323†	0.3554							
4.625	0.3728	0.3592							
4.875	0.3328	0.3645							
5.125	0.3866	0.4071	0.3398						
5.375	0.3682	0.3722	0.3522						
5.625	0.3711, 0.3769	0.3765	0.3709	0.3118					
5.875	0.3674	0.3730	0.3768						
6.125		0.3748	0.3829	0.3848	0.3039				
6.375	0.3895	0.3900	0.3873	0.3926	0.3271				
6.625	0.3790	0.3896	0.3936	0.4192	0.3426	0.3190			
6.875	0.3860	0.3933	0.4059	0.3956	0.3887	0.3172, 0.3162			
7.125	0.3902	0.3862	0.3792	0.3813	0.3802	0.3040			
7.375	0.3857	0.3773	0.3823	0.3815	0.3760	0.3411	0.2964		

WTR1421
RUN 53

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/IO) PSI#2(IC/I)

ALPH 4.91 deg PHI 156.79 deg PO 14.89 psia TO 108.06 degF MACH 3.0
AVERAGED DATA SCALE FACTOR: 1.0000

WTR1421
RUN 53

WING PRESSURES (PSI)

z/d	theta:	171.8	186.8	201.8	216.8	231.8
0.5	0.8100					
1.0	0.6364					
1.5	0.5007	0.5463	0.5906	0.6358	0.6793	0.7111, 0.4664
2.0	0.4006	0.3686	0.3868	0.4154	0.4433	0.5567, 0.3600
2.5	0.3546					0.4783
3.0	0.2857					
3.5	0.2907	0.2950	0.3155	0.3353	0.3614	0.3769
4.0	0.2988	0.2986	0.3099	0.3303	0.3524	0.3680
4.3	0.2985	0.2983	0.3094	0.3271	0.3482	0.3612
4.5	0.3007	0.2953	0.3092	0.3251	0.3464	0.3620
4.8	0.3032	0.2987	0.3140	0.3279	0.3505	0.3584
5.0	0.3055	0.3049	0.3122	0.3380	0.3415	0.3689
5.5	0.3086	0.3076	0.3154	0.3296	0.3461	0.3706
6.0	0.3083	0.3070	0.3118	0.3274	0.3497	0.3633
6.5	0.3130	0.3057	0.3196	0.3463	0.3481	0.3642
7.0	0.3090	0.3051	0.3083	0.3251	0.3467	0.3791
7.5	0.3095	0.3052	0.3171	0.3228	0.3503	0.3639
8.0	0.3330	0.3699	0.3277	0.3636	0.3395	0.3619

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.3279*							
3.875	0.3079+							
4.125	0.2749							
4.375	0.25941	0.2927						
4.625	0.2891	0.2879						
4.875	0.2661	0.2805						
5.125	0.3879	0.4082						
5.375	0.3646	0.3405	0.2734					
5.625	0.3487, 0.3705	0.3643	0.2637					
5.875	0.3592	0.3658	0.2672	0.2485				
6.125		0.3659	0.2853					
6.375	0.3767	0.3659	0.3146	0.2589	0.2432			
6.625	0.3653	0.3795	0.3327	0.2536	0.2539			
6.875	0.3603	0.3780	0.3466	0.2880	0.2628	0.2520		
7.125	0.3779	0.3764	0.3705	0.2947	0.2646	0.2485, 0.2440		
7.375		0.3680	0.3449	0.2971	0.2574	0.2322		
		0.3622	0.3484	0.3101	0.2707	0.2264	0.2231	

WHITE OAK LABORATORY

WTR1421
RUN 54WTR1421
RUN 54TUNNEL 12 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/I)

ALPHI	9.96 deg	PHI	156.63 deg	P0	14.89 psia	TO	108.06 deg	MACH	3.0
			AVERAGED DATA		SCALE FACTOR:	1.0000			

BODY PRESSURES (PSI)

z/d	theta:	171.6	186.6	201.6	216.6	231.6
0.5	0.6950					
1.0	0.5336					
1.5	0.4115					
2.0	0.3222	0.4873	0.5769	0.6759	0.7786	0.8645, 0.3830
2.5	0.2754	0.3070	0.3604	0.4318	0.5032	0.6816, 0.3000
3.0	0.2074					0.5824
3.5	0.2134	0.2159	0.2702	0.3279	0.3956	0.4417
4.0	0.2171	0.2046	0.2502	0.3114	0.3728	0.4195
4.3	0.2141	0.1992	0.2450	0.3033	0.3632	0.4081
4.5	0.2117	0.1892	0.2356	0.2959	0.3603	0.4101
4.8	0.2115	0.1911	0.2368	0.2964	0.3652	0.4083
5.0	0.2125	0.1989	0.2314	0.3068	0.3555	0.4199
5.5	0.2199	0.2083	0.2324	0.2978	0.3612	0.4126
6.0	0.2231	0.2154	0.2259	0.2945	0.3631	0.4025
6.5	0.2291	0.2175	0.2389	0.3016	0.3598	0.4024
7.0	0.2261	0.2169	0.2199	0.2899	0.3596	0.4150
7.5	0.2265	0.2101	0.2259	0.2847	0.3612	0.4001
8.0	0.2446	0.2841	0.2370	0.2752	0.3556	0.4282

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.3302*							
3.875	0.3105*							
4.125	0.2644							
4.375	0.25761	0.2825						
4.625	0.2902							
4.875	0.2588	0.2859						
5.125	0.4367	0.2818						
5.375	0.4117	0.4561						
5.625	0.3344	0.2877						
5.875	0.4128	0.2940						
6.125	0.4006	0.2988	0.2706	0.2424				
6.375	0.4161	0.3113	0.2847	0.2543	0.2344			
6.625	0.4035	0.3359	0.2895	0.2477	0.2516			
6.875	0.3978	0.3444	0.2943	0.2685	0.2642	0.2458		
7.125	0.4107	0.3462	0.3118	0.2746	0.2565	0.2428, 0.1953		
7.375	0.4055	0.3412	0.2834	0.2683	0.2335	0.2259		
		0.3451	0.2849	0.2791	0.2351	0.2248	0.2216	

WHITE OAK LABORATORY

WTR1421
RUN 55WTR1421
RUN 55TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)

ALPH	14.96 deg	PHI	156.74 deg	P0	14.90 psia	T0	108.14 degF	MACH	3.0
			AVERAGED DATA		SCALE FACTOR:	1.0000			

BODY PRESSURES (PSI)

z/d	theta:	171.7	186.7	201.7	216.7	231.7
0.5	0.5707					
1.0	0.4230					
1.5	0.3139					
2.0	0.2387	0.4278	0.5646	0.7255	0.8985	1.0521, 0.3185
2.5	0.1951	0.2568	0.3469	0.4629	0.5868	0.8357, 0.2456
3.0	0.1364					0.7193
3.5	0.1449					
4.0	0.1583	0.1673	0.2516	0.3460	0.4546	0.5359
4.3	0.1582	0.1527	0.2285	0.3239	0.4278	0.5163
4.5	0.1573	0.1459	0.2250	0.3157	0.4190	0.5008
4.8	0.1606	0.1341	0.2130	0.3106	0.4183	0.5075
5.0	0.1657	0.1374	0.2180	0.3135	0.4298	0.5052
5.5	0.1799	0.1485	0.2150	0.3288	0.4199	0.5146
6.0	0.1845	0.1640	0.2198	0.3226	0.4298	0.5013
6.5	0.1928	0.1717	0.2181	0.3241	0.4329	0.4890
7.0	0.1901	0.1745	0.2332	0.3344	0.4357	0.4914
7.5	0.1927	0.1791	0.2176	0.3270	0.4363	0.4995
8.0	0.2078	0.1817	0.2323	0.3293	0.4434	0.4831
		0.2487	0.2474	0.2854	0.4444	0.5566

WING PRESSURES (PSI)

z/d	r/d:	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.3628*						
3.875	0.3435+						
4.125	0.3016						
4.375	0.31431						
4.625	0.3485						
4.875	0.2841						
5.125	0.4770						
5.375	0.4502						
5.625	0.2902						
5.875	0.4469						
6.125	0.4391						
6.375	0.4555						
6.625	0.4480						
6.875	0.4469						
7.125	0.4548						
7.375	0.4377						
		0.2912					
		0.2774					
		0.3378					
		0.3353					
		0.3217					
		0.3192					
		0.3308					
		0.3307					
		0.3219					
		0.3129					
		0.3099					
		0.2824					
		0.2779					
		0.2893					
		0.2830					
		0.3075					
		0.3154					
		0.3061					
		0.3134					
		0.2700					
		0.2957					
		0.2998					
		0.2865					
		0.2626					
		0.2596					
		0.2817					
		0.2785, 0.1410					
		0.2623					
		0.2680					
		0.2605					

WIR1421
RUN 56

ALPH -0.08 deg PHI 179.37 deg
AVERAGED DATA

WIR1421
RUN 56

TUNNEL 12 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

P0 14.88 psia
SCALE FACTOR: 1.0000

10 108.23 degF

MACH 3.0

194.4 209.4 224.4 239.4 254.4

0.5815 0.5890 0.5910 0.5917 0.5886, 0.5835
0.4616, 0.4418
0.4024

0.4035 0.3978 0.3974 0.3955

0.3359 0.3405 0.3391 0.3456 0.3454
0.3474 0.3474 0.3489 0.3502 0.3530
0.3504 0.3526 0.3494 0.3556 0.3504
0.3525 0.3589 0.3555 0.3564 0.3563
0.3599 0.3685 0.3641 0.3682 0.3580
0.3714 0.3714 0.3812 0.3624 0.3759
0.3756 0.3755 0.3763 0.3745 0.3803
0.3813 0.3804 0.3802 0.3781 0.3788
0.3819 0.3864 0.3858 0.3836 0.3849
0.3866 0.3795 0.3787 0.3848 0.3924
0.3864 0.3914 0.3786 0.3879 0.3860
0.4330 0.4060 0.4395 0.3694 0.3518

BODY PRESSURES (PSI)

WING PRESSURES (PSI)

0.7185 0.8435 0.9685 1.0935 1.2185 1.3435

0.3622 0.3662 0.4093 0.3734 0.3772 0.3735 0.3754 0.3910 0.3903 0.3765 0.3781 0.3793

0.3622 0.3662 0.4093 0.3734 0.3772 0.3735 0.3754 0.3910 0.3903 0.3765 0.3781 0.3793

0.3430 0.3561 0.3725 0.3144 0.3876 0.3932 0.3908 0.3957 0.3773 0.3825

0.3055 0.3273 0.3380 0.3913 0.3814 0.3778

0.3151 0.3161, 0.3243 0.3027 0.3456 0.2973

WHITE OAK LABORATORY

WTR1421
RUN 57TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)WTR1421
RUN 57ALPH 4.95 deg PHI 179.01 deg AVERAGED DATA P0 14.88 psia T0 108.33 degf MACH 3.0
SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	179.0	209.0	224.0	239.0	254.0
0.5	0.8900					
1.0*	0.7002					
1.5	0.5505					
2.0	0.4377	0.6065	0.6572	0.6985	0.7342	0.7509, 0.4670
2.5	0.3839	0.4068	0.4301	0.4600	0.4830	0.5901, 0.3581
3.0	0.3039					0.5076
3.5	0.3034	0.3208	0.3488	0.3721	0.3987	0.4149
4.0	0.3077	0.3222	0.3451	0.3715	0.3952	0.4150
4.3	0.3063	0.3207	0.3459	0.3690	0.3944	0.4093
4.5	0.3069	0.3171	0.3455	0.3692	0.3930	0.4112
4.8	0.3094	0.3198	0.3510	0.3733	0.3995	0.4076
5.0	0.3118	0.3262	0.3484	0.3846	0.3903	0.4175
5.5	0.3165	0.3278	0.3497	0.3732	0.3927	0.4116
6.0	0.3165	0.3256	0.3438	0.3685	0.3909	0.4070
6.5	0.3236	0.3333	0.3483	0.3653	0.3879	0.4083
7.0	0.3172	0.3234	0.3377	0.3707	0.3863	0.4125
7.5	0.3195	0.3220	0.3420	0.3562	0.3954	0.4162
8.0	0.3353	0.3723	0.3545	0.3895	0.3731	0.3604

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.4437*							
3.875	0.4259*							
4.125	0.4002							
4.375	0.3864	0.4165						
4.625	0.4184							
4.875	0.3851	0.4124						
5.125	0.4316	0.4107						
5.375	0.4077	0.4514						
5.625	0.3792	0.4140	0.3918					
5.875	0.4015	0.4125	0.3959					
6.125		0.4058	0.3979	0.3487				
6.375	0.4209	0.4041	0.4086	0.4042	0.3547			
6.625	0.4092	0.4172	0.4172	0.4232	0.3617			
6.875	0.4039	0.4158	0.4167	0.4329	0.3953	0.3138		
7.125	0.4052	0.4006	0.4187	0.4155	0.4133	0.3298, 0.3371		
7.375	0.4014	0.4005	0.3984	0.4032	0.3940	0.3361		
		0.4005	0.4017	0.4008	0.3906	0.3600	0.3008	

WTR1421
RUN 58

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PS1#1(PR/10) PS1#2(TC/1)

WIR1421 RUN 58		TUNNEL T2 PRESSURE TEST		PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)		WTR1421 RUN 58	
ALPH	9.94 deg	PHI	179.39 deg	P0	14.88 psi	T0	108.55 degF
		AVERAGED DATA		SCALE FACTOR:		MACH 3.0	

BODY PRESSURES (PSI)

z/d	theta:	179.4	194.4	209.4	224.4	239.4	254.4
0.5		0.8477					
1.0		0.6584					
1.5		0.5106					
2.0		0.3993	0.6187	0.7236	0.8236	0.9103	0.9605, 0.3824
2.5		0.3389	0.3988	0.4654	0.5403	0.6007	0.7623, 0.2975
3.0		0.2524					0.6553
3.5		0.2406	0.2942	0.3614	0.4231	0.4863	0.5274
4.0		0.2289	0.2822	0.3478	0.4156	0.4764	0.5224
4.3		0.2213	0.2751	0.3459	0.4100	0.4692	0.5110
4.5		0.2114	0.2658	0.3388	0.4078	0.4685	0.5127
4.8		0.2070	0.2634	0.3425	0.4090	0.4739	0.5083
5.0		0.2092	0.2649	0.3369	0.4190	0.4619	0.5190
5.5		0.2255	0.2610	0.3315	0.4008	0.4591	0.5035
6.0		0.2402	0.2516	0.3193	0.3913	0.4533	0.4963
6.5		0.2616	0.2446	0.3129	0.3857	0.4498	0.4968
7.0		0.2642	0.2496	0.3135	0.3831	0.4403	0.4969
7.5		0.2697	0.2521	0.3069	0.3716	0.4377	0.4877
8.0		0.2881	0.3263	0.3115	0.3477	0.4250	0.4555

WING PRESSURES (PSI)

z/d	$r/d:$	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.5635*							
3.875	0.5480†							
4.125	0.5077							
4.375	0.49531	0.5227						
4.625	0.5363		0.5188					
4.875	0.4724		0.5293					
5.125	0.5314		0.5498	0.4785				
5.375	0.5022		0.5078	0.4902				
5.625	0.3634, 0.5076		0.5030	0.4940	0.4256			
5.875	0.4978		0.4967	0.4897				
6.125			0.4938	0.4985	0.5013	0.4205		
6.375	0.5147		0.5093	0.4975	0.4912	0.4737		
6.625	0.5017		0.5054	0.4967	0.4945	0.4946	0.3767	
6.875	0.4925		0.4870	0.4986	0.4865	0.4957	0.3975, 0.3887	
7.125	0.4909		0.4866	0.4786	0.4764	0.4713	0.4191	
7.375	0.4878		0.4825	0.4809	0.4759	0.4651	0.4210	0.3428

WTR1421
RUN 59

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPHI 14.94 deg PHI 201.90 deg P0 14.88 psia TO 108.62 degf MACH 3.0

AVERAGED DATA SCALE FACTOR: 1.0000

WTR1421
RUN 59

BODY PRESSURES (PSI)

z/d	theta:	216.9	231.9	246.9	261.9	276.9
0.5	1.1155					
1.0	0.8824					
1.5	0.7028	0.8945	1.0637	1.1934	1.2711	1.2610, 0.2939
2.0	0.5585					1.0157, 0.2158
2.5	0.4743	0.5947	0.7092	0.8117	0.8647	0.8803
3.0	0.3633					
3.5	0.3514	0.4548	0.5618	0.6478	0.7197	0.7710
4.0	0.3370	0.4436	0.5551	0.6570	0.7321	0.7787
4.3	0.3324	0.4387	0.5590	0.6531	0.7270	0.7979
4.5	0.3253	0.4384	0.5596	0.6575	0.7319	0.8024
4.8	0.3183	0.4389	0.5632	0.6630	0.7572	0.7990
5.0	0.3203	0.4417	0.5561	0.6781	0.7471	0.8093
5.5	0.3152	0.4326	0.5502	0.6575	0.7280	0.7769
6.0	0.3092	0.4198	0.5339	0.6386	0.7164	0.7645
6.5	0.2993	0.4008	0.5203	0.6260	0.7071	0.7580
7.0	0.2987	0.3998	0.5024	0.6059	0.6889	0.7538
7.5	0.2740	0.3887	0.5239	0.5989	0.6912	0.7463
8.0	0.2745	0.3130	0.5055	0.5366	0.6362	0.5625

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.8787*							
3.875	0.8678+							
4.125	0.8621							
4.375	0.85291	0.8691						
4.625	0.8445	0.8390						
4.875	0.8658	0.8256						
5.125	0.8122	0.7990						
5.375	0.7837	0.7913						
5.625	0.2009, 0.7935	0.7854	0.8510					
5.875	0.7808	0.7819	0.7956	0.8201	0.8402			
6.125		0.7920	0.7954	0.8021	0.8445			
6.375	0.7885	0.7906	0.7955	0.8022	0.8445			
6.625	0.7685	0.7617	0.7939	0.8106	0.8258	0.8639		
6.875	0.7619	0.7580	0.7911	0.7952	0.8145	0.8492, 0.4915		
7.125	0.7571	0.7486	0.7628	0.7803	0.7879	0.8152		
7.375	0.7592		0.7595	0.7687	0.7753	0.7920	0.8288	

WHITE OAK LABORATORY

WTR1421
RUN 60

ALPH -0.06 deg

PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)

TUNNEL T2 PRESSURE TEST

201.65 deg

PO 14.87 psia

TO 108.82 degF

MACH 3.0

AVG DATA

SCALE FACTOR: 1.0000

theta: 201.7

z/d

0.5

1.0

1.5

2.0

2.5

3.0

3.5

4.0

4.3

4.5

4.8

5.0

5.5

6.0

6.5

7.0

7.5

8.0

0.9107

0.7212

0.5683

0.4585

0.4089

0.3298

0.3377

0.3503

0.3518

0.3581

0.3638

0.3692

0.3756

0.3833

0.3909

0.3893

0.3874

0.3984

216.7

0.5856

0.4053

0.3366

0.3486

0.3518

0.3530

0.3606

0.3729

0.3773

0.3814

0.3851

0.3898

0.3888

0.4335

231.7

0.5939

0.3998

0.3416

0.3482

0.3541

0.3596

0.3703

0.3727

0.3765

0.3813

0.3866

0.3821

0.3946

0.4077

246.7

0.5960

0.3992

0.3400

0.3505

0.3501

0.3562

0.3651

0.3837

0.3780

0.3813

0.3839

0.3813

0.3802

0.4410

261.7

0.5967

0.3975

0.3467

0.3518

0.3577

0.3581

0.3700

0.3636

0.3764

0.3799

0.3846

0.3812

0.3949

0.3722

276.7

0.5924, 0.5818

0.4645, 0.4386

0.4043

0.3475

0.3556

0.3531

0.3592

0.3593

0.3783

0.3819

0.3809

0.3864

0.3923

0.3877

0.3548

WING PRESSURES (PSI)

z/d

3.625

3.875

4.125

4.375

4.625

4.875

5.125

5.375

5.625

5.875

6.125

6.375

6.625

6.875

7.125

7.375

0.5935

0.3784*

0.3599†

0.3470

0.3440†

0.3641

0.3787

0.3454

0.3908

0.3709

0.3726, 0.3808

0.3685

0.3929

0.3808

0.3776

0.3801

0.3818

0.7185

0.3705

0.3709

0.4110

0.3750

0.3789

0.3739

0.3760

0.3927

0.3923

0.3788

0.3795

0.3799

0.8435

0.3521

0.3674

0.3733

0.3789

0.3854

0.3901

0.3925

0.3977

0.3788

0.3788

0.3838

0.9685

0.3228

0.3956

0.3938

0.4039

0.3922

0.3847

0.3853

1.0935

0.3120

0.3366

0.3497

0.3975

0.3838

0.3798

1.2185

0.3206

0.3206, 0.3430

0.3106

0.3619

1.3435

WHITE OAK LABORATORY

WTR1421
RUN 61

ALPH 4.95 deg PHI 201.63 deg
AVERAGED DATA

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

SCALE FACTOR: 1.0000

108.92 degf

MACH 3.0

WTR1421
RUN 61

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

SCALE FACTOR: 1.0000

108.92 degf

MACH 3.0

BODY PRESSURES (PSI)

z/d	theta:	201.6	216.6	231.6	246.6	261.6	276.6
0.5	0.9906						
1.0	0.7821						
1.5	0.6179						
2.0	0.4905	0.6769	0.7221	0.7520	0.7708	0.7641, 0.4769	
2.5	0.4272	0.4536	0.4762	0.4984	0.5079	0.6014, 0.3623	
3.0	0.3377					0.5181	
3.5	0.3350	0.3580	0.3848	0.4030	0.4262	0.4430	
4.0	0.3373	0.3600	0.3852	0.4106	0.4318	0.4504	
4.3	0.3350	0.3599	0.3888	0.4097	0.4343	0.4477	
4.5	0.3352	0.3579	0.3905	0.4130	0.4325	0.4512	
4.8	0.3381	0.3612	0.3979	0.4178	0.4416	0.4506	
5.0	0.3410	0.3677	0.3958	0.4313	0.4329	0.4654	
5.5	0.3448	0.3673	0.3938	0.4188	0.4381	0.4559	
6.0	0.3466	0.3639	0.3892	0.4161	0.4359	0.4465	
6.5	0.3638	0.3615	0.3879	0.4124	0.4323	0.4461	
7.0	0.3477	0.3748	0.3915	0.4046	0.4238	0.4506	
7.5	0.3455	0.3614	0.3927	0.4112	0.4322	0.4421	
8.0	0.3617	0.3976	0.3992	0.4328	0.4139	0.3639	

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.5045*							
3.875	0.4878*							
4.125	0.4764							
4.375	0.46931	0.4913						
4.625	0.4862	0.4934						
4.875	0.4851	0.4788						
5.125	0.4725	0.4916	0.4911					
5.375	0.4468	0.4585	0.4723					
5.625	0.4070, 0.4512	0.4537	0.4562	0.4709				
5.875	0.4361	0.4443	0.4554					
6.125		0.4446	0.4562	0.4727	0.4628			
6.375	0.4597	0.4591	0.4665	0.4605	0.4775			
6.625	0.4475	0.4580	0.4602	0.4688	0.4708			
6.875	0.4424	0.4432	0.4635	0.4563	0.4677	0.4808	0.4750, 0.262	
7.125	0.4431	0.4435	0.4434	0.4486	0.4434	0.4550		
7.375	0.4488	0.4401	0.4465	0.4496	0.4385	0.4446	0.4509	

WHITE OAK LABORATORY									
TUNNEL 12 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)									
WIR1421 RUN 62	9.95 deg	PHI	201.90 deg AVERAGED DATA	P0	14.87 psia SCALE FACTOR:	T0	109.05 degF	MACH	3.0
ALPH									
BODY PRESSURES (PSI)									
z/d	theta:	201.9	216.9	231.9	246.9	261.9	276.9		
0.5		1.0537							
1.0		0.8310							
1.5		0.6571							
2.0		0.5182		0.7763	0.8758	0.9496	0.9935	0.9861, 0.3793	
2.5		0.4426		0.5133	0.5765	0.6342	0.6631	0.7846, 0.2857	
3.0		0.3408						0.6755	
3.5		0.3310		0.3926	0.4555	0.5042	0.5490	0.5820	
4.0		0.3211		0.3857	0.4512	0.5112	0.5572	0.5915	
4.3		0.3152		0.3821	0.4538	0.5091	0.5573	0.5881	
4.5		0.3086		0.3783	0.4527	0.5120	0.5549	0.6012	
4.8		0.3051		0.3781	0.4577	0.5137	0.5676	0.6042	
5.0		0.3039		0.3820	0.4536	0.5276	0.5597	0.6096	
5.5		0.2936		0.3732	0.4481	0.5114	0.5564	0.5865	
6.0		0.2865		0.3610	0.4393	0.5053	0.5492	0.5760	
6.5		0.2879		0.3475	0.4273	0.4956	0.5418	0.5759	
7.0		0.2889		0.3633	0.4137	0.4797	0.5310	0.5726	
7.5		0.2719		0.3407	0.4340	0.4746	0.5323	0.5612	
8.0		0.2791		0.3173	0.4223	0.4555	0.4996	0.4329	
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	0.6655*								
3.875	0.6509†								
4.125	0.6422								
4.375	0.6335†								
4.625	0.6381								
4.875	0.6485								
5.125	0.6153								
5.375	0.5862								
5.625	0.3815, 0.5922								
5.875	0.5798				0.6339				
6.125					0.5859				
6.375	0.5958				0.5840				
6.625	0.5787				0.5970				
6.875	0.5713				0.5906				
7.125	0.5691				0.5731				
7.375	0.5644				0.5707				
					0.5741				
					0.5745				
					0.5815				
					0.6187	0.6235			
					0.6026	0.6335			
					0.6114	0.6200	0.6454		
					0.5986	0.6126	0.6343, 0.4497		
					0.5741	0.5858	0.6055		
					0.5815	0.5787	0.5890	0.6114	

WTR1421
RUN 63

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)

ALPH 14.98 deg PHI 201.99 deg PO 14.87 psia TO 109.09 degf MACH 3.0

AVERAGED DATA SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	202.0	217.0	232.0	247.0	262.0	277.0
0.5	1.1159						
1.0	0.8831						
1.5	0.7028						
2.0	0.5590		0.8954	1.0649	1.1963	1.2719	1.2615, 0.2937
2.5	0.4752		0.5954	0.7101	0.8124	0.8653	1.0165, 0.2151
3.0	0.3636						0.8811
3.5	0.3522		0.4553	0.5619	0.6483	0.7208	0.7716
4.0	0.3380		0.4438	0.5549	0.6573	0.7327	0.7797
4.3	0.3324		0.4389	0.5592	0.6533	0.7278	0.7985
4.5	0.3258		0.4385	0.5599	0.6580	0.7323	0.8035
4.8	0.3189		0.4393	0.5642	0.6636	0.7587	0.7997
5.0	0.3208		0.4428	0.5568	0.6794	0.7474	0.8105
5.5	0.3156		0.4331	0.5508	0.6584	0.7288	0.7809
6.0	0.3098		0.4199	0.5346	0.6393	0.7168	0.7653
6.5	0.3003		0.4013	0.5205	0.6263	0.7079	0.7585
7.0	0.2998		0.4010	0.5024	0.6050	0.6895	0.7545
7.5	0.2746		0.3893	0.5254	0.5990	0.6921	0.7464
8.0	0.2743		0.3130	0.5064	0.5372	0.6376	0.5635

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.8796*							
3.875	0.8683+							
4.125	0.8629							
4.375	0.8541	0.8731						
4.625	0.8452							
4.875	0.8667							
5.125	0.8132							
5.375	0.7839							
5.625	0.2007	0.7946						
5.875	0.7808				0.8512			
6.125						0.8403		
6.375	0.7889					0.8454		
6.625	0.7680					0.8264		
6.875	0.7613					0.8113	0.8644	
7.125	0.7569					0.8151	0.8498, 0.4915	
7.375	0.7591					0.7874	0.8154	
						0.7748	0.7923	0.8286

WHITE OAK LABORATORY

WTR1421
RUN 64WTR1421
RUN 64TUNNEL 12 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)ALPH 0.09 deg PHI 224.53 deg PU 14.86 psia TO 109.36 degF MACH 3.0
AVERAGED DATA SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	239.5	254.5	269.5	284.5	299.5
0.5	0.9154					
1.0	0.7243					
1.5	0.5710					
2.0	0.4621	0.5892	0.5980	0.5993	0.5991	0.5949, 0.5832
2.5	0.4110	0.4069	0.4013	0.4013	0.3981	0.4663, 0.4376
3.0	0.3286					0.4058
3.5	0.3385	0.3371	0.3407	0.3396	0.3477	0.3486
4.0	0.3515	0.3489	0.3478	0.3506	0.3527	0.3582
4.3	0.3320	0.3511	0.3547	0.3493	0.3597	0.3550
4.5	0.3592	0.3528	0.3599	0.3561	0.3594	0.3622
4.8	0.3642	0.3607	0.3723	0.3662	0.3724	0.3606
5.0	0.3699	0.3751	0.3751	0.3866	0.3642	0.3820
5.5	0.3763	0.3787	0.3761	0.3795	0.3780	0.3832
6.0	0.3834	0.3814	0.3820	0.3821	0.3809	0.3829
6.5	0.3937	0.3837	0.3854	0.3831	0.3865	0.3868
7.0	0.3921	0.3935	0.3826	0.3786	0.3800	0.3937
7.5	0.3890	0.3907	0.3982	0.3820	0.3939	0.3874
8.0	0.3989	0.4336	0.4097	0.4430	0.3761	0.3541

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.3840*							
3.875	0.3657+							
4.125	0.3541							
4.375	0.3511	0.3709						
4.625	0.3831							
4.875	0.3559							
5.125	0.3920							
5.375	0.3727							
5.625	0.3743	0.3836						
5.875	0.3711			0.3349				
6.125				0.3790				
6.375	0.3946			0.3868	0.3985	0.3193		
6.625	0.3810			0.3912	0.3929	0.3475		
6.875	0.3784			0.3948	0.4055	0.3595	0.3233	
7.125	0.3817			0.3999	0.3944	0.4022	0.3205, 0.3489	
7.375	0.3800			0.3811	0.3863	0.3832	0.3279	
				0.3857	0.3871	0.3794	0.3780	0.3071

WHITE OAK LABORATORY									
TUNNEL 12 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	9.94 deg	PHI	224.61 deg	P0	14.86 psia	TO	109.65 degf	MACII	3.0
			AVERAGED DATA		SCALE FACTOR:	1.0000			
BODY PRESSURES (PSI)									
z/d	theta:		239.6	254.6	269.6	284.6	299.6		
0.5	1.2631								
1.0	1.0159								
1.5	0.8114		0.9143	0.9806	1.0039	0.9890	0.9232, 0.4048		
2.0	0.6469						0.7315, 0.2919		
2.5	0.5570		0.6175	0.6557	0.6761	0.6597	0.6273		
3.0	0.4392								
3.5	0.4295		0.4828	0.5221	0.5378	0.5548	0.5808		
4.0	0.4232		0.4781	0.5213	0.5577	0.5863	0.5934		
4.3	0.4178		0.4762	0.5299	0.5641	0.5928	0.6200		
4.5	0.4173		0.4795	0.5378	0.5754	0.5926	0.6574		
4.8	0.4177		0.4846	0.5515	0.5809	0.6079	0.6542		
5.0	0.4200		0.4938	0.5494	0.5954	0.6187	0.6718		
5.5	0.4141		0.4808	0.5362	0.5982	0.6330	0.6542		
6.0	0.4070		0.4762	0.5535	0.5976	0.6215	0.6361		
6.5	0.4133		0.4782	0.5394	0.5848	0.6132	0.6323		
7.0	0.4095		0.4727	0.5228	0.5645	0.5964	0.6309		
7.5	0.4036		0.4777	0.5291	0.5570	0.5977	0.6182		
8.0	0.4051		0.4397	0.5383	0.5682	0.5540	0.4245		
WING PRESSURES (PSI)									
z/d	r/d:		0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	0.7271*								
3.875	0.7139†								
4.125	0.7144								
4.375	0.70751	0.7263							
4.625	0.7071	0.7263							
4.875	0.7271	0.7008							
5.125	0.6826	0.6982							
5.375	0.6529	0.6728							
5.625	0.4448, 0.6593	0.6669							
5.875	0.6408	0.6549			0.7153				
6.125		0.6481							
6.375	0.6506	0.6593			0.7041	0.7125			
6.625	0.6315	0.6722			0.6846	0.7226			
6.875	0.6252	0.6671			0.6920	0.7081			
7.125	0.6284	0.6312			0.6743	0.6982	0.7366		
7.375	0.6250	0.6284			0.6575	0.6684	0.7257, 0.5246		
		0.6361			0.6492	0.6574	0.6954		
							0.6761	0.7019	

WTR1421
RUN 67

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH	14.94 deg	PHI	225.21 deg	P0	14.86 psia	T0	109.38 degf	MACH	3.0
AVERAGED DATA				SCALE FACTOR: 1.0000					

z/d	theta:	BODY PRESSURES (PSI)					
		225.2	240.2	255.2	270.2	285.2	300.2
0.5	1.4656						
1.0	1.1889						
1.5	0.9706						
2.0	0.7792	1.1418		1.2535	1.2914	1.2608	1.1457, 0.2980
2.5	0.6706						0.9156, 0.1931
3.0	0.5317	0.7803		0.8535	0.8881	0.8605	0.7947
3.5	0.5205						
4.0	0.5080	0.6144		0.6817	0.7089	0.7252	0.7625
4.3	0.5027	0.6036		0.6790	0.7386	0.7804	0.8056
4.5	0.5021	0.6020		0.6930	0.7496	0.7845	0.8335
4.8	0.5037	0.6120		0.7072	0.7680	0.7905	0.8841
5.0	0.5083	0.6189		0.7232	0.7712	0.8465	0.8940
5.5	0.4868	0.6259		0.7136	0.7892	0.8586	0.9117
6.0	0.4991	0.5973		0.7263	0.8044	0.8400	0.8732
6.5	0.4906	0.5912		0.7096	0.7822	0.8240	0.8495
7.0	0.4712	0.5857		0.6929	0.7671	0.8146	0.8461
7.5	0.4635	0.5886		0.6729	0.7423	0.7950	0.8459
8.0	0.4525	0.5859		0.6832	0.7365	0.7988	0.8335
		0.4859		0.6839	0.7100	0.7275	0.5520

WING PRESSURES (PSI)

z/d	$r/d:$	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.9707*							
3.875	0.9613†							
4.125		0.9664						
4.375	0.9632†	0.9751						
4.625		0.9540	0.9768					
4.875		0.9840	0.9495					
5.125		0.9140	0.9256					
5.375		0.8801	0.9096	0.9875				
5.625	0.3557, 0.8839		0.8973	0.9524	0.9736			
5.875	0.8636		0.8815	0.9223				
6.125			0.8726	0.9104				
6.375		0.8701	0.8816	0.9052	0.9477	0.9689		
6.625	0.8482		0.8686	0.9015	0.9224	0.9754		
6.875	0.8437		0.8501	0.8933	0.9277	0.9548	0.9946	
7.125	0.8381		0.8471	0.8887	0.9048	0.9414	0.9818, 0.6056	
7.375	0.8341		0.8363	0.8589	0.8872	0.9077	0.9458	
				0.8570	0.8751	0.8916	0.9196	0.9583

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST					WTR1421				
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)					RUN 68				
ALPH	-0.05 deg	PIII	246.94 deg	P0	14.85 psia	TO	109.94 degf	MACH	3.0
AVERAGED DATA					SCALE FACTOR: 1.0000				
BODY PRESSURES (PSI)									
z/d	theta:	246.9	261.9	276.9	291.9	306.9	321.9		
0.5	0.9233								
1.0	0.7311								
1.5	0.5765		0.5947	0.6031	0.6042	0.6030	0.5966,0.5833		
2.0	0.4658						0.4679,0.4388		
2.5	0.4135		0.4095	0.4047	0.4034	0.4005	0.4070		
3.0	0.3305								
3.5	0.3396		0.3385	0.3421	0.3410	0.3485	0.3508		
4.0	0.3526		0.3499	0.3492	0.3526	0.3552	0.3613		
4.3	0.3529		0.3524	0.3558	0.3513	0.3626	0.3596		
4.5	0.3600		0.3539	0.3611	0.3580	0.3623	0.3656		
4.8	0.3650		0.3622	0.3739	0.3678	0.3750	0.3642		
5.0	0.3713		0.3769	0.3769	0.3887	0.3668	0.3850		
5.5	0.3783		0.3801	0.3787	0.3817	0.3804	0.3877		
6.0	0.3847		0.3827	0.3840	0.3842	0.3832	0.3851		
6.5	0.3933		0.3840	0.3863	0.3847	0.3876	0.3899		
7.0	0.3955		0.3952	0.3826	0.3794	0.3829	0.3968		
7.5	0.3911		0.3934	0.4005	0.3836	0.3995	0.3912		
8.0	0.4007		0.4358	0.4145	0.4479	0.3771	0.3532		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	0.3921*								
3.875	0.3739*								
4.125	0.3649								
4.375	0.36271	0.3813							
4.625	0.3902								
4.875	0.3743								
5.125	0.3941								
5.375	0.3732			0.3811					
5.625	0.3774	0.3853		0.3813					
5.875	0.3722			0.3755	0.3601				
6.125				0.3797					
6.375	0.3986			0.3888	0.3983	0.3379			
6.625	0.3843			0.3963	0.3900	0.3632			
6.875	0.3816			0.3991	0.4059	0.3833	0.3418		
7.125	0.3849			0.4037	0.3961	0.4063	0.3366,0.3614		
7.375	0.3908			0.3838	0.3889	0.3848	0.3565		
				0.3884	0.3898	0.3807	0.3825	0.3199	

WHITE OAK LABORATORY

WTR1421
RUN 69

ALPHI 4.97 deg PHI 246.75 deg

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)

PO 14.85 psia
SCALE FACTOR: 1.0000

TO 110.11 degF

MACH 3.0

BODY PRESSURES (PSI)

z/d	theta:	261.7	276.7	291.7	306.7	321.7
0.5	1.1622					
1.0	0.9252					
1.5	0.7361	0.7708	0.7813	0.7684	0.7417	0.6938, 0.5473
2.0	0.5870					0.5420, 0.4091
2.5	0.5121	0.5222	0.5193	0.5107	0.4882	0.4673
3.0	0.4066					
3.5	0.4035	0.4141	0.4179	0.4112	0.4187	0.4327
4.0	0.4063	0.4167	0.4217	0.4311	0.4448	0.4582
4.3	0.4044	0.4172	0.4297	0.4371	0.4550	0.4578
4.5	0.4065	0.4183	0.4372	0.4474	0.4547	0.4680
4.8	0.4113	0.4258	0.4514	0.4565	0.4640	0.4746
5.0	0.4166	0.4392	0.4547	0.4750	0.4590	0.4999
5.5	0.4250	0.4430	0.4555	0.4643	0.4740	0.5087
6.0	0.4322	0.4435	0.4541	0.4637	0.4925	0.5012
6.5	0.4423	0.4407	0.4520	0.4823	0.4927	0.4994
7.0	0.4470	0.4563	0.4704	0.4771	0.4832	0.5017
7.5	0.4553	0.4746	0.4888	0.4745	0.4924	0.4956
8.0	0.4754	0.5078	0.5006	0.5317	0.4612	0.3619

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.5480*							
3.875	0.5323+							
4.125	0.5345							
4.375	0.53091	0.5488						
4.625	0.5420							
4.875	0.5499							
5.125	0.5259							
5.375	0.5017							
5.625	0.4760, 0.5089							
5.875	0.4944							
6.125								
6.375	0.5133							
6.625	0.4946							
6.875	0.4892							
7.125	0.4912							
7.375	0.4997							
		0.5536						
		0.5349						
		0.5441						
		0.5149						
		0.5129						
		0.5047						
		0.5023						
		0.5168						
		0.5128						
		0.5238						
		0.4991						
		0.5007						
		0.5405						
		0.5425						
		0.5276						
		0.5388						
		0.5244						
		0.5126						
		0.5077						
		0.5363						
		0.5510						
		0.5439						
		0.5385						
		0.5130						
		0.5586						
		0.5525, 0.5012						
		0.5284						
		0.5155						
		0.5282						

WHITE OAK LABORATORY										
TUNNEL T2 PRESSURE TEST										
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)										
WTR1421 RUN 70	ALPH	9.92 deg	PHI	246.72 deg AVERAGED DATA	P0	14.85 psia SCALE FACTOR:	T0	110.39 degf	MACH	3.0
BODY PRESSURES (PSI)										
z/d	theta:	246.7	261.7	276.7	291.7	306.7	321.7			
0.5	1.4231									
1.0	1.1628									
1.5	0.9340		0.9963	1.0090	0.9738	0.9062	0.7984, 0.4872			
2.0	0.7504						0.6285, 0.3502			
2.5	0.6502		0.6807	0.6779	0.6533	0.5980	0.5363			
3.0	0.5187									
3.5	0.5084		0.5366	0.5395	0.5157	0.5067	0.5324			
4.0	0.5046		0.5318	0.5367	0.5416	0.5637	0.5577			
4.3	0.4991		0.5298	0.5460	0.5573	0.5789	0.5545			
4.5	0.5010		0.5337	0.5594	0.5792	0.5821	0.6207			
4.8	0.5033		0.5410	0.5814	0.5944	0.6042	0.6408			
5.0	0.5062		0.5567	0.5899	0.6164	0.6065	0.6653			
5.5	0.5092		0.5585	0.5854	0.5998	0.6364	0.6577			
6.0	0.5126		0.5497	0.5756	0.6302	0.6429	0.6530			
6.5	0.5193		0.5482	0.6069	0.6296	0.6396	0.6550			
7.0	0.5424		0.5805	0.5976	0.6127	0.6248	0.6591			
7.5	0.5609		0.5784	0.6126	0.6113	0.6345	0.6532			
8.0	0.5544		0.5844	0.6217	0.6493	0.5915	0.4629			
WING PRESSURES (PSI)										
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435		
3.625	0.7386*									
3.875	0.7258*									
4.125	0.7291									
4.375	0.72871	0.7410								
4.625	0.7346		0.7473							
4.875	0.7473		0.7289							
5.125	0.7095		0.7247							
5.375	0.6802		0.7000							
5.625	0.5522, 0.6853		0.6920		0.7369					
5.875	0.6670		0.6794		0.7010					
6.125			0.6759		0.6974					
6.375	0.6804		0.6880		0.6965		0.7328			
6.625	0.6587		0.6900		0.7107		0.7439			
6.875	0.6551		0.6636		0.7192		0.7318			
7.125	0.6549		0.6605		0.7025		0.7245			
7.375	0.6496		0.6518		0.6894		0.6944			
					0.6678		0.6862			
					0.6793		0.7002			
							0.7527			
							0.7430, 0.6097			
							0.7186			
							0.7002			
							0.7178			

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST					WTR1421				
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)					RUN 72				
ALPH	-0.09 deg	PHI	269.64 deg	PO	14.84 psia	TO	110.59 degF	MACH	3.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	284.6	299.6	314.6	329.6	344.6			
0.5	0.9288								
1.0	0.7362								
1.5	0.5800								
2.0	0.4688	0.5987	0.6061	0.6076	0.6035	0.5963, 0.5855			
2.5	0.4165	0.4116	0.4064	0.4048	0.4015	0.4674, 0.4398			
3.0	0.3314					0.4078			
3.5	0.3403	0.3394	0.3423	0.3409	0.3491	0.3518			
4.0	0.3530	0.3498	0.3498	0.3536	0.3561	0.3629			
4.3	0.3532	0.3525	0.3570	0.3526	0.3644	0.3617			
4.5	0.3601	0.3538	0.3616	0.3593	0.3641	0.3679			
4.8	0.3660	0.3626	0.3751	0.3690	0.3765	0.3652			
5.0	0.3725	0.3782	0.3785	0.3908	0.3674	0.3856			
5.5	0.3796	0.3815	0.3799	0.3829	0.3819	0.3891			
6.0	0.3854	0.3841	0.3851	0.3856	0.3847	0.3856			
6.5	0.3943	0.3856	0.3873	0.3851	0.3878	0.3906			
7.0	0.3965	0.3963	0.3829	0.3788	0.3824	0.4032			
7.5	0.3935	0.3951	0.4041	0.3855	0.3991	0.3924			
8.0	0.4014	0.4360	0.4145	0.4479	0.3798	0.3539			

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.3960*							
3.875	0.3778*							
4.125	0.3686							
4.375	0.3678	0.3853						
4.625	0.3948							
4.875	0.3830							
5.125	0.3957							
5.375	0.3740							
5.625	0.3799	0.3851						
5.875	0.3715							
6.125	0.3992							
6.375	0.3855							
6.625	0.3849							
6.875	0.3880							
7.125	0.3892							
7.375								
		0.3940						
		0.3866						
		0.4157						
		0.3812						
		0.3809						
		0.3734						
		0.3796						
		0.4007						
		0.4019						
		0.3865						
		0.3870						
		0.3873						
			0.3898					
			0.3862					
			0.3767					
			0.3801					
			0.3891					
			0.3891					
			0.4026					
			0.4069					
			0.3974					
			0.3913					
			0.3929					
			0.3583					
			0.3798					
			0.3943					
			0.4028					
			0.3836					
			0.3814					
				0.3595				
				0.3484, 0.3693				
				0.3854				
				0.3829				
				0.3341				

WHITE OAK LABORATORY

WTR1421
RUN 73

ALPH 4.92 deg PHI 269.66 deg
AVERAGED DATA

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSIN1(PR/10) PSIN2(TC/1)

WTR1421
RUN 73

MACH 3.0

z/d theta: 269.7
0.5 1.1924
1.0 0.9516
1.5 0.7584
2.0 0.6066
2.5 0.5291
3.0 0.4207
3.5 0.4169
4.0 0.4207
4.3 0.4182
4.5 0.4209
4.8 0.4258
5.0 0.4321
5.5 0.4429
6.0 0.4534
6.5 0.4650
7.0 0.4718
7.5 0.4768
8.0 0.4929

284.7 299.7 314.7 329.7 344.7

0.7712 0.7594 0.7269 0.6849 0.6273, 0.6078
0.5239 0.5047 0.4803 0.4475 0.4895, 0.4559
0.4218

0.4145 0.4045 0.3860 0.3909 0.4042
0.4165 0.4067 0.4084 0.4205 0.4341
0.4168 0.4154 0.4167 0.4335 0.4359
0.4171 0.4242 0.4303 0.4359 0.4458
0.4252 0.4412 0.4430 0.4500 0.4516
0.4407 0.4472 0.4643 0.4437 0.4771
0.4492 0.4538 0.4580 0.4574 0.4869
0.4556 0.4592 0.4596 0.4734 0.4896
0.4572 0.4569 0.4677 0.4845 0.4947
0.4710 0.4649 0.4777 0.4813 0.5018
0.4786 0.5008 0.4881 0.4937 0.4956
0.5251 0.5099 0.5407 0.4687 0.3755

WING PRESSURES (PSI)

z/d r/d: 0.5935
3.625 0.5374*
3.875 0.5214*
4.125 0.5249
4.375 0.52341 0.5397
4.625 0.5365
4.875 0.5431
5.125 0.5235
5.375 0.4997
5.625 0.4992, 0.5078
5.875 0.4923
6.125 0.5135
6.375 0.4953
6.625 0.4937
6.875 0.4936
7.125 0.4965
7.375

0.7185 0.8435 0.9685 1.0935 1.2185 1.3435

0.5460 0.5491 0.5306 0.5134 0.5140 0.5320
0.5012 0.5177 0.5393 0.5288
0.5175 0.5223 0.5254 0.5459
0.5154 0.5223 0.5376 0.5392
0.4973 0.5236 0.5224 0.5367
0.4957 0.4997 0.5115 0.5112
0.4932 0.5024 0.5090 0.5057

0.5461, 0.5317
0.5256
0.5150 0.5220

WHITE OAK LABORATORY

WTR1421
RUN 74WTR1421
RUN 74TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH	9.93 deg	PHI	269.47 deg	PO	14.84 psia	TO	110.66 degF	MACH	3.0
	AVERAGED DATA			SCALE FACTOR:			1.0000		

BODY PRESSURES (PSI)

z/d	theta:	269.5	284.5	299.5	314.5	329.5	344.5
0.5	1.4933						
1.0	1.2299						
1.5	0.9895						
2.0	0.7974	0.9944	0.9944	0.9515	0.8691	0.7665	0.6478, 0.6170
2.5	0.6916		0.6802	0.6354	0.5740	0.4964	0.5012, 0.4551
3.0	0.5554						0.4246
3.5	0.5434		0.5355	0.5004	0.4461	0.4241	0.4485
4.0	0.5407		0.5308	0.4953	0.4647	0.4851	0.4845
4.3	0.5365		0.5278	0.4980	0.4829	0.5081	0.4911
4.5	0.5386		0.5272	0.5069	0.5151	0.5234	0.5173
4.8	0.5396		0.5309	0.5332	0.5429	0.5520	0.5312
5.0	0.5399		0.5461	0.5499	0.5736	0.5553	0.5565
5.5	0.5476		0.5578	0.5666	0.5727	0.5800	0.5587
6.0	0.5665		0.5708	0.5783	0.5809	0.6034	0.5733
6.5	0.5873		0.5814	0.5803	0.6044	0.6107	0.5900
7.0	0.5981		0.5995	0.5992	0.6099	0.6075	0.6077
7.5	0.6102		0.6134	0.6388	0.6234	0.6225	0.6099
8.0	0.6352		0.6633	0.6486	0.6754	0.5769	0.4657

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.6949*							
3.875	0.6812*							
4.125	0.7053							
4.375	0.70341							
4.625	0.7107							
4.875	0.7157							
5.125	0.6864							
5.375	0.6595							
5.625	0.6463, 0.6620							
5.875	0.6461				0.7004			
6.125								
6.375	0.6641				0.7077	0.6946		
6.625	0.6456				0.6891	0.7098		
6.875	0.6440				0.6981	0.7013	0.7107	
7.125	0.6419				0.6797	0.6970	0.7049, 0.6861	
7.375	0.6455				0.6552	0.6706	0.6854	
					0.6659	0.6828	0.6715	0.6758

WHITE OAK LABORATORY

WTR1421
RUN 75WTR1421
RUN 75TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH	14.94 deg	PHI	269.47 deg	P0	14.84 psia	T0	110.99 degf	NACH	3.0
			AVERAGED DATA		SCALE FACTOR:	1.0000			

BODY PRESSURES (PSI)

z/d	theta:	284.5	299.5	314.5	329.5	344.5
0.5	1.8490					
1.0	1.5496					
1.5	1.2852	1.2790	1.1911	1.0387	0.8626	0.6726, 0.6296
2.0	1.0443					0.5245, 0.4640
2.5	0.9120	0.8927	0.8136	0.7032	0.5682	0.4428
3.0	0.7422					
3.5	0.7259	0.7105	0.6420	0.5436	0.4745	0.5080
4.0	0.7181	0.6999	0.6330	0.5522	0.5838	0.5922
4.3	0.7117	0.6942	0.6330	0.5905	0.6274	0.6098
4.5	0.7167	0.6967	0.6412	0.6494	0.6520	0.6379
4.8	0.7177	0.6986	0.6758	0.6901	0.6943	0.6538
5.0	0.7148	0.7134	0.7042	0.7333	0.7090	0.6752
5.5	0.7136	0.7246	0.7295	0.7376	0.7434	0.6657
6.0	0.7357	0.7405	0.7483	0.7546	0.7717	0.6856
6.5	0.7648	0.7583	0.7595	0.7924	0.7870	0.7198
7.0	0.7834	0.7895	0.7875	0.7964	0.7947	0.7649
7.5	0.8050	0.8092	0.8349	0.8150	0.8183	0.7733
8.0	0.8338	0.8558	0.8438	0.8650	0.7304	0.5771

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.8940*							
3.875	0.8834*							
4.125	0.9389							
4.375	0.94541	0.9478						
4.625	0.9434							
4.875	0.9374							
5.125	0.8698							
5.375	0.8479							
5.625	0.8149, 0.8558							
5.875	0.8420				0.9132			
6.125								
6.375	0.8589				0.9283	0.9035		
6.625	0.8364				0.9103	0.9206		
6.875	0.8368				0.9205	0.9173	0.9160	
7.125	0.8379				0.9021	0.9162	0.9134, 0.8912	
7.375	0.8326				0.8943	0.8918	0.9001	
					0.8896	0.8824	0.8859	0.8772

WILIE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	-0.05 deg	PIII	292.27 deg AVERAGED DATA	P0	14.84 psia SCALE FACTOR:	10	111.09 degF	MACH	3.0
BODY PRESSURES (PSI)									
z/d	theta:	292.3	307.3	322.3	337.3	352.3	367.3		
0.5	0.9342								
1.0	0.7407								
1.5	0.5842								
2.0	0.4722		0.6021	0.6080	0.6069	0.6033	0.5949, 0.5881		
2.5	0.4187		0.4139	0.4076	0.4060	0.4014	0.4653, 0.4420		
3.0	0.3327						0.4063		
3.5	0.3419								
4.0	0.3541		0.3402	0.3430	0.3407	0.3501	0.3531		
4.3	0.3540		0.3512	0.3505	0.3541	0.3574	0.3645		
4.5	0.3605		0.3539	0.3585	0.3536	0.3660	0.3638		
4.8	0.3663		0.3543	0.3625	0.3601	0.3659	0.3702		
5.0	0.3730		0.3629	0.3768	0.3701	0.3779	0.3656		
5.5	0.3805		0.3791	0.3794	0.3922	0.3681	0.3851		
6.0	0.3866		0.3829	0.3807	0.3839	0.3827	0.3871		
6.5	0.3945		0.3850	0.3864	0.3867	0.3856	0.3876		
7.0	0.3977		0.3850	0.3878	0.3860	0.3890	0.3916		
7.5	0.3945		0.3973	0.3834	0.3794	0.3854	0.4022		
8.0	0.4009		0.3964	0.4044	0.3834	0.3997	0.3934		
			0.4356	0.4148	0.4482	0.3819	0.3558		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.3996*							
3.875	0.3812+							
4.125	0.3717							
4.375	0.3719	0.3881						
4.625	0.3963							
4.875	0.3877							
5.125	0.3961							
5.375	0.3744							
5.625	0.3813, 0.3868							
5.875	0.3709							
6.125								
6.375	0.3987							
6.625	0.3828							
6.875	0.3858							
7.125	0.3895							
7.375	0.4003							
		0.3979	0.3778	0.3894	0.4018	0.3712		
		0.3882	0.3978	0.3931	0.3895	0.3912		
		0.4162	0.4026	0.3999	0.4056	0.3958		
		0.3834	0.3873	0.4089	0.3989	0.4038		
		0.3841	0.3894	0.3904	0.3934	0.3739, 0.3768		
		0.3738	0.3917	0.3958	0.3960	0.3871		
						0.3796		
						0.3812		
						0.3820		
						0.3812		
						0.3472		

WHITE OAK LABORATORY									
WIR1421 RUN 77		TUNNEL T2 PRESSURE TEST							
		PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)							
ALPH	4.94 deg	PII	292.17 deg AVERAGED DATA	PO	14.83 psia SCALE FACTOR:	TO	111.12 degf	MACH	3.0
BODY PRESSURES (PSI)									
z/d	theta:	292.2	307.2	322.2	337.2	352.2	367.2		
0.5	1.1739								
1.0	0.9373								
1.5	0.7460		0.7378	0.7076	0.6638	0.6147	0.5613, 0.6744		
2.0	0.5967						0.4376, 0.5062		
2.5	0.5224		0.5012	0.4678	0.4356	0.4007	0.3778		
3.0	0.4135								
3.5	0.4099		0.3941	0.3735	0.3497	0.3592	0.3705		
4.0	0.4137		0.3957	0.3756	0.3761	0.3878	0.4014		
4.3	0.4112		0.3956	0.3843	0.3851	0.4017	0.3957		
4.5	0.4140		0.3952	0.3940	0.3989	0.4044	0.4038		
4.8	0.4189		0.4030	0.4120	0.4123	0.4193	0.4059		
5.0	0.4239		0.4195	0.4190	0.4349	0.4119	0.4297		
5.5	0.4328		0.4276	0.4260	0.4291	0.4285	0.4399		
6.0	0.4421		0.4345	0.4356	0.4344	0.4476	0.4529		
6.5	0.4549		0.4409	0.4416	0.4491	0.4624	0.4662		
7.0	0.4617		0.4588	0.4457	0.4570	0.4591	0.4794		
7.5	0.4643		0.4636	0.4804	0.4660	0.4775	0.4737		
8.0	0.4856		0.5175	0.4939	0.5249	0.4554	0.3742		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	0.5062*								
3.875	0.4898*								
4.125	0.4948								
4.375	0.49531	0.5097							
4.625	0.5097								
4.875	0.5138								
5.125	0.4994								
5.375	0.4778								
5.625	0.5047	0.4887							
5.875	0.4726				0.5029				
6.125									
6.375	0.4958				0.5177	0.5015			
6.625	0.4789				0.5027	0.5202			
6.875	0.4804				0.5171	0.5144	0.5207		
7.125	0.4827				0.5041	0.5147	0.5190, 0.5430		
7.375	0.4926				0.4962	0.4911	0.5007		
					0.4942	0.4877	0.4916	0.4948	

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	9.93 deg	PIII	292.28 deg AVERAGED DATA	P0	14.83 psia SCALE FACTOR:	TO	111.35 degf	MACH	3.0
BODY PRESSURES (PSI)									
z/d	theta:	292.3	307.3	322.3	337.3	352.3	367.3		
0.5	1.4436								
1.0	1.1873								
1.5	0.9515		0.9032	0.8202	0.7141	0.6093	0.5061, 0.7704		
2.0	0.7673						0.3857, 0.5809		
2.5	0.6669		0.6145	0.5401	0.4623	0.3846	0.3251		
3.0	0.5336								
3.5	0.5201		0.4786	0.4177	0.3486	0.3294	0.3507		
4.0	0.5181		0.4726	0.4088	0.3621	0.3871	0.3908		
4.3	0.5127		0.4685	0.4089	0.3869	0.4134	0.4042		
4.5	0.5152		0.4629	0.4104	0.4181	0.4270	0.4160		
4.8	0.5164		0.4648	0.4347	0.4463	0.4536	0.4132		
5.0	0.5177		0.4770	0.4540	0.4810	0.4574	0.4308		
5.5	0.5222		0.4847	0.4824	0.4890	0.4874	0.4378		
6.0	0.5326		0.5033	0.5059	0.5080	0.5089	0.4545		
6.5	0.5482		0.5183	0.5222	0.5259	0.5248	0.4797		
7.0	0.5552		0.5352	0.5247	0.5355	0.5325	0.5089		
7.5	0.5685		0.5435	0.5569	0.5629	0.5625	0.5238		
8.0	0.5832		0.6125	0.5928	0.6211	0.5240	0.4098		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	0.6146*								
3.875	0.5997*								
4.125	0.6404								
4.375	0.6434	0.6532							
4.625	0.6545								
4.875	0.6471								
5.125	0.5982		0.6641						
5.375	0.5757		0.6150						
5.625	0.6824	0.5849	0.6265						
5.875	0.5677		0.6086		0.6284				
6.125			0.6075						
6.375	0.5867		0.6193		0.6452	0.6195			
6.625	0.5672		0.6308		0.6331	0.6382			
6.875	0.5665		0.6186		0.6447	0.6362	0.6318		
7.125	0.5693		0.6015		0.6306	0.6370	0.6321, 0.7326		
7.375	0.5751		0.5991		0.6221	0.6132	0.6162		
			0.5964	0.6184	0.6227	0.6080	0.6079	0.5982	

WHITE OAK LABORATORY

WTR1421
RUN 79

ALPH 14.93 deg PHI 292.53 deg PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

TUNNEL T2 PRESSURE TEST

PO 14.84 psia TO 111.36 degf MACH 3.0

SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	292.5	307.5	322.5	337.5	352.5	367.5
0.5	1.7624						
1.0	1.4751						
1.5	1.2164						
2.0	0.9886	1.1137	0.9583	0.7783	0.6053	0.4500, 0.8844	0.3369, 0.6734
2.5	0.8634	0.7713	0.6433	0.5077	0.3780	0.2792	
3.0	0.6994						
3.5	0.6798						
4.0	0.6733	0.6034	0.4937	0.3777	0.3118	0.3430	
4.3	0.6652	0.5923	0.4812	0.3779	0.4079	0.4032	
4.5	0.6712	0.5861	0.4780	0.4053	0.4452	0.4102	
4.8	0.6725	0.5820	0.4760	0.4608	0.4706	0.4224	
5.0	0.6728	0.5823	0.4925	0.5026	0.5055	0.4366	
5.5	0.6745	0.5941	0.5094	0.5484	0.5153	0.4753	
6.0	0.6815	0.5871	0.5524	0.5695	0.5598	0.5124	
6.5	0.6832	0.6004	0.5946	0.6015	0.5968	0.5428	
7.0	0.7102	0.6205	0.6174	0.6234	0.6289	0.5763	
7.5	0.7086	0.6451	0.6068	0.6416	0.6485	0.6173	
8.0	0.7139	0.6522	0.6699	0.7088	0.7068	0.6481	
		0.7394	0.7022	0.7275	0.6218	0.4666	

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.6784*							
3.875	0.6645+							
4.125	0.8305							
4.375	0.83271	0.8410						
4.625	0.8351	0.8493						
4.875	0.8161	0.8300						
5.125	0.6271	0.6432						
5.375	0.6092	0.7973	0.8181					
5.625	0.9107	0.6237	0.8122	0.7915				
5.875	0.6150	0.7587	0.8092					
6.125		0.7472	0.8175					
6.375	0.6441	0.7528	0.8149	0.8191	0.7775			
6.625	0.6304	0.7394	0.8205	0.8149	0.7958			
6.875	0.6378	0.7218	0.8284	0.8302	0.8017	0.7788		
7.125	0.6482	0.7166	0.8281	0.8174	0.8085	0.7805, 0.9788		
7.375	0.6623	0.7002	0.8042	0.8133	0.7912	0.7755		
			0.8118	0.8183	0.7898	0.7715	0.7394	

WHITE OAK LABORATORY										WTR1421 RUN 80
TUNNEL 12 PRESSURE TEST										
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)										
ALPHI	-0.07 deg	PHI	314.92 deg AVERAGED DATA	P0	14.83 psia SCALE FACTOR:	TO	111.54 degF	MACH	3.0	
BODY PRESSURES (PSI)										
z/d	theta:	314.9	329.9	344.9	359.9	374.9	389.9			
0.5		0.9352								
1.0		0.7413								
1.5		0.5838								
2.0		0.4740								
2.5		0.4200								
3.0		0.3325								
3.5		0.3420								
4.0		0.3544								
4.3		0.3544								
4.5		0.3610								
4.8		0.3668								
5.0		0.3736								
5.5		0.3801								
6.0		0.3866								
6.5		0.3946								
7.0		0.3982								
7.5		0.3945								
8.0		0.4002								
WING PRESSURES (PSI)										
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435		
3.625	0.3996*									
3.875	0.3814*									
4.125	0.3723									
4.375	0.3729	0.3887								
4.625	0.3964									
4.875	0.3887									
5.125	0.3954									
5.375	0.3729									
5.625	0.3808	0.3853								
5.875	0.3689									
6.125										
6.375	0.3980									
6.625	0.3808									
6.875	0.3810									
7.125	0.3857									
7.375	0.3973									

WHITE OAK LABORATORY									
WIR1421 RUN 81					WIR1421 RUN 81				
ALPH 4.93 deg					MACH 3.0				
PHI					TO 111.63 degf				
314.70 deg					1.0000				
AVERAGED DATA					SCALE FACTOR:				
PSI CONFIGURATION					PSI#2(TC/1)				
TUNNEL T2 PRESSURE TEST					TO 111.63 degf				
PSI#1(PR/10)					1.0000				
P0 14.83 psia					389.7				
BODY PRESSURES (PSI)					0.5101, 0.7309				
329.7					0.3987, 0.5516				
0.6807					0.3494				
0.4602					0.3619				
0.3604					0.3423				
0.3622					0.3623				
0.3612					0.3560				
0.3589					0.3633				
0.3661					0.3621				
0.3823					0.3900				
0.3876					0.4109				
0.4001					0.4216				
0.4050					0.4306				
0.4157					0.4420				
0.4279					0.4397				
0.4230					0.3706				
0.4370									
theta:									
314.7									
1.1130									
0.8870									
0.7036									
0.5632									
0.4938									
0.3872									
0.3844									
0.3882									
0.3849									
0.3876									
0.3919									
0.3952									
0.4001									
0.4050									
0.4157									
0.4279									
0.4230									
0.4370									
z/d									
0.5									
1.0									
1.5									
2.0									
2.5									
3.0									
3.5									
4.0									
4.3									
4.5									
4.8									
5.0									
5.5									
6.0									
6.5									
7.0									
7.5									
8.0									
r/d:									
0.5935									
0.4634*									
0.4464*									
0.4533									
0.4688									
0.4724									
0.4734									
0.4654									
0.4468									
0.4591									
0.4443									
0.4698									
0.4512									
0.4492									
0.4525									
0.4629									
WING PRESSURES (PSI)									
0.7185									
0.8435									
0.9685									
1.0935									
1.2185									
1.3435									
0.4796									
0.4676									
0.4555									
0.4598									
0.4667									
0.4725									
0.4789									
0.4917									
0.4603									
0.4651									
0.4805									
0.4712									
0.4941									
0.4777									
0.4696									
0.4690									
0.4611									
0.4888									
0.4823									
0.4848									
0.4615									
0.4588									
0.4594									
0.4580									

WILLIE OAK LABORATORY									
WTR1421 RUN 82		TUNNEL T2 PRESSURE TEST							
		PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)							
ALPH	9 91 deg	P11	314.93 deg AVERAGED DATA	P0	14.83 psia SCALE FACTOR:	T0	111.78 degF	MACH	3.0
BODY PRESSURES (PSI)									
z/d	theta:	314.9	329.9	344.9	359.9	374.9	389.9		
0.5	1.2962								
1.0	1.0553								
1.5	0.8397		0.7609	0.6641	0.5658	0.4777	0.4114, 0.9043		
2.0	0.6760						0.3120, 0.6902		
2.5	0.5853		0.5094	0.4275	0.3561	0.2955	0.2657		
3.0	0.4617								
3.5	0.4478		0.3873	0.3203	0.2579	0.2705	0.2804		
4.0	0.4447		0.3790	0.3085	0.2870	0.3068	0.3040		
4.3	0.4383		0.3737	0.3085	0.3081	0.3261	0.3020		
4.5	0.4391		0.3629	0.3093	0.3263	0.3334	0.3126		
4.8	0.4414		0.3649	0.3368	0.3489	0.3542	0.3085		
5.0	0.4406		0.3775	0.3573	0.3827	0.3527	0.3287		
5.5	0.4364		0.3773	0.3846	0.3913	0.3799	0.3415		
6.0	0.4359		0.3882	0.4040	0.4067	0.3918	0.3548		
6.5	0.4486		0.3970	0.4116	0.4180	0.4093	0.3734		
7.0	0.4389		0.4075	0.4156	0.4448	0.4245	0.4002		
7.5	0.4277		0.4047	0.4661	0.4722	0.4726	0.4311		
8.0	0.4426		0.4761	0.4777	0.5094	0.4335	0.3733		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	0.5053*								
3.875	0.4889†								
4.125	0.5514								
4.375	0.5570†								
4.625	0.5724								
4.875	0.5623								
5.125	0.4847								
5.375	0.4596								
5.625	0.6588, 0.4682								
5.875	0.4494				0.5423				
6.125									
6.375	0.4708				0.5637	0.5315			
6.625	0.4529				0.5555	0.5612			
6.875	0.4493				0.5777	0.5576	0.5466		
7.125	0.4552				0.5612	0.5607	0.5472, 0.7243		
7.375	0.4643				0.5537	0.5386	0.5334		
					0.5565	0.5357	0.5283	0.5114	

WTR1421
RUN 83

ALPH

14.95 deg

III

015.13 deg
AVERAGED D

TUNNEL	T2 PRESSURE TEST
PSI CONFIGURATION	PSI#1(PR/10) PSI

PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)

PO 14.83 psia
SCALE FACTOR

TO
1.0000

11.95 degF

MACH

WTR1421
RUN 83

3.

BODY PRESSURES (PSI)

z/d	theta:	315.1
0.5	1.5036	
1.0	1.2389	
1.5	1.0095	
2.0	0.8155	
2.5	0.7103	
3.0	0.5650	
3.5	0.5435	
4.0	0.5369	
4.3	0.5286	
4.5	0.5328	
4.8	0.5364	
5.0	0.5365	
5.5	0.5243	
6.0	0.5369	
6.5	0.5244	
7.0	0.5051	
7.5	0.4857	
8.0	0.4860	

375.1	390.1
0.3999	0.3017
	0.2147
0.2332	0.1767
0.1912	0.2112
0.2572	0.2507
0.2795	0.2449
0.2918	0.2814
0.3184	0.2862
0.3232	0.3090
0.3606	0.3205
0.3792	0.3384
0.4216	0.3745
0.4482	0.4217
0.4925	0.4499
0.4271	0.3710

390.1
0.3017, 1.1205
0.2147, 0.8648
0.1767

WING PRESSURES (PSI)

z/d	r/d	σ
3.625	0.4347*	0.5935
3.875	0.4170+	
4.125		0.6529
4.375	0.6674	0.6659
4.625		0.6630
4.875		0.6625
5.125		0.3813
5.375		0.3655
5.625	0.8817, 0.3802	
5.875		0.3707
6.125		0.4062
6.375		0.3977
6.625		0.4031
6.875		0.4158
7.125		0.4244
7.375		

0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
0.6873					
0.6566					
0.4018	0.6673				
0.6086	0.6700				
0.5779	0.6664	0.5407			
0.5388	0.6695				
0.5084	0.6752	0.6772	0.6222		
0.5017	0.6751	0.6732	0.6532		
0.4810	0.6791	0.7038	0.6602	0.6280	
0.4600	0.6924	0.6936	0.6740	0.6317, 0.9805	
0.4536	0.6519	0.6966	0.6632	0.6319	
0.4278	0.6460	0.7067	0.6691	0.6364	0.5915

A-134

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST					WTR1421				
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)					RUN 84				
ALPH	-0.11 deg	PHI	337.74 deg	P0	14.81 psia	TO	112.06 degF	MACH	3.0
AVERAGED DATA									
BODY PRESSURES (PSI)									
z/d	theta:	337.7	352.7	367.7	382.7	397.7	412.7		
0.5	0.9354								
1.0	0.7424								
1.5	0.5835		0.6015	0.6054	0.6034	0.5953	0.5853,0.5966		
2.0	0.4740						0.4587,0.4456		
2.5	0.4214		0.4144	0.4064	0.4030	0.3967	0.4019		
3.0	0.3319								
3.5	0.3418		0.3391	0.3414	0.3387	0.3480	0.3502		
4.0	0.3542		0.3501	0.3485	0.3522	0.3556	0.3631		
4.3	0.3538		0.3523	0.3572	0.3501	0.3651	0.3615		
4.5	0.3611		0.3536	0.3616	0.3580	0.3643	0.3687		
4.8	0.3668		0.3627	0.3775	0.3688	0.3776	0.3633		
5.0	0.3734		0.3805	0.3802	0.3931	0.3650	0.3824		
5.5	0.3798		0.3819	0.3777	0.3824	0.3807	0.3834		
6.0	0.3865		0.3834	0.3853	0.3850	0.3837	0.3862		
6.5	0.3950		0.3837	0.3868	0.3841	0.3878	0.3906		
7.0	0.3990		0.3999	0.3822	0.3755	0.3766	0.3985		
7.5	0.3933		0.3954	0.4057	0.3795	0.3999	0.3938		
8.0	0.3993		0.4344	0.4146	0.4480	0.3838	0.3594		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	0.3975*								
3.875	0.3795†								
4.125	0.3713								
4.375	0.3714†	0.3876							
4.625	0.3947								
4.875	0.3880								
5.125	0.3941								
5.375	0.3714			0.3948					
5.625	0.3802, 0.3852			0.3896					
5.875	0.3677			0.3776	0.3784				
6.125				0.3812					
6.375	0.3980			0.3868	0.4001	0.3706			
6.625	0.3808			0.3898	0.3888	0.3923			
6.875	0.3804			0.3976	0.4054	0.3964	0.3811		
7.125	0.3844			0.4071	0.3979	0.4033	0.3780,0.3845		
7.375	0.3891			0.3885	0.3938	0.3811	0.3864		
				0.3962	0.3976	0.3818	0.3810	0.3497	

WHITE OAK LABORATORY

WTR1421
RUN 85

ALPH 4.91 deg PHI 337.42 deg P0 14.82 psia TO 112.07 degF MACH 3.0

PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)

TUNNEL T2 PRESSURE TEST

AVERAGED DATA SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	337.4	352.4	367.4	382.4	397.4	412.4
0.5	1.0218						
1.0	0.8115						
1.5	0.6401						
2.0	0.5122		0.6114	0.5739	0.5366	0.5035	0.4781, 0.7653
2.5	0.4492		0.4127	0.3791	0.3553	0.3371	0.3765, 0.5792
3.0	0.3498						0.3353
3.5	0.3469						
4.0	0.3512		0.3229	0.3071	0.3039	0.3193	0.3246
4.3	0.3474		0.3259	0.3148	0.3229	0.3288	0.3360
4.5	0.3494		0.3257	0.3235	0.3226	0.3374	0.3321
4.8	0.3531		0.3225	0.3268	0.3279	0.3358	0.3387
5.0	0.3560		0.3294	0.3426	0.3390	0.3481	0.3359
5.5	0.3574		0.3467	0.3475	0.3642	0.3411	0.3695
6.0	0.3604		0.3514	0.3539	0.3604	0.3724	0.3895
6.5	0.3748		0.3549	0.3612	0.3655	0.3878	0.3972
7.0	0.3722		0.3561	0.3616	0.3726	0.3972	0.4036
7.5	0.3700		0.3713	0.3685	0.3859	0.3927	0.4139
8.0	0.3791		0.4142	0.4083	0.4011	0.4185	0.4137
				0.4196	0.4530	0.3894	0.3696

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.4141*							
3.875	0.3962+							
4.125	0.4014							
4.375	0.40471							
4.625	0.4290		0.4302					
4.875	0.4286		0.4212					
5.125	0.4262		0.4458	0.4349				
5.375	0.4064		0.4190	0.4274				
5.625	0.4561, 0.4202		0.4209	0.4149	0.4198			
5.875	0.4057		0.4135	0.4205				
6.125			0.4179	0.4279	0.4415	0.4183		
6.375	0.4357		0.4396	0.4356	0.4329	0.4428		
6.625	0.4172		0.4396	0.4432	0.4513	0.4412	0.4414	
6.875	0.4149		0.4223	0.4482	0.4403	0.4466	0.4435, 0.4844	
7.125	0.4177		0.4237	0.4251	0.4327	0.4234	0.4295	
7.375	0.4275		0.4245	0.4310	0.4404	0.4283	0.4242	0.4190

WTR1421
RUN 86

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/IO) PSI#2(IC/I)

ALPH 9.94 deg PHII 337.51 deg PO 14.82 psia 10 112.14 degf MACH 3.0

AVERAGED DATA SCALE FACTOR: 1.0000

WTR1421
RUN 86

z/d theta: 337.5

0.5 1.0939

1.0 0.8739

1.5 0.6882

2.0 0.5507

2.5 0.4748

3.0 0.3636

3.5 0.3496

4.0 0.3447

4.3 0.3368

4.5 0.3337

4.8 0.3322

5.0 0.3257

5.5 0.3341

6.0 0.3155

6.5 0.3154

7.0 0.3103

7.5 0.2927

8.0 0.2957

352.5 367.5 382.5 397.5 412.5

0.6047 0.5220 0.4496 0.4003 0.3768, 0.9858

0.3957 0.3271 0.2777 0.2557 0.2955, 0.7574

0.2878 0.2350 0.2290 0.2484 0.2525

0.2782 0.2290 0.2504 0.2555 0.2459

0.2711 0.2422 0.2538 0.2656 0.2480

0.2564 0.2511 0.2600 0.2671 0.2572

0.2585 0.2766 0.2746 0.2799 0.2480

0.2710 0.2863 0.3029 0.2728 0.2629

0.2769 0.2982 0.3021 0.2869 0.2628

0.2724 0.3159 0.3193 0.2932 0.2701

0.2717 0.3207 0.3527 0.3228 0.2911

0.3053 0.3129 0.3393 0.3268 0.3283

0.3047 0.3540 0.3569 0.3766 0.3360

0.3337 0.3718 0.4063 0.3622 0.3379

WING PRESSURES (PSI)

z/d r/d: 0.5935

3.625 0.4219*

3.875 0.4039*

4.125 0.4432

4.375 0.45231 0.4589

4.625 0.4764

4.875 0.4746

5.125 0.4110

5.375 0.3831

5.625 0.5953 0.3906

5.875 0.3675

6.125

6.375 0.3876

6.625 0.3677

6.875 0.3638

7.125 0.3713

7.375 0.3744

0.7185 0.8435 0.9685 1.0935 1.2185 1.3435

0.4764 0.4692 0.4311 0.4574 0.4507 0.4315 0.4261 0.4361 0.4284 0.4074 0.4112 0.4019

0.4806 0.4749 0.4632 0.4642 0.4681 0.4693 0.4737 0.4807 0.4638 0.4772

0.4599 0.4806 0.4716 0.4871 0.4769 0.4756 0.4897

0.4505 0.4743 0.4738 0.4785 0.4650 0.4638

0.4670 0.4667, 0.6436 0.4577 0.4516 0.4350

WHITE OAK LABORATORY

WTR1421
RUN 88WTR1421
RUN 88TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)ALPH -0.09 deg PHI 359.95 deg P0 14.81 psia T0 112.54 degf MACH 3.0
AVERAGED DATA SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	375.0	390.0	405.0	420.0	435.0
0.5	0.9351					
1.0	0.7422					
1.5	0.5835	0.6007	0.6042	0.5999	0.5926	0.5835, 0.6029
2.0	0.4746					0.4568, 0.4496
2.5	0.4215	0.4129	0.4057	0.4015	0.3960	0.4010
3.0	0.3312					
3.5	0.3421	0.3388	0.3403	0.3370	0.3458	0.3478
4.0	0.3542	0.3494	0.3468	0.3504	0.3533	0.3613
4.3	0.3530	0.3510	0.3556	0.3476	0.3638	0.3595
4.5	0.3604	0.3519	0.3598	0.3556	0.3621	0.3669
4.8	0.3659	0.3608	0.3762	0.3665	0.3754	0.3596
5.0	0.3726	0.3792	0.3790	0.3916	0.3616	0.3802
5.5	0.3781	0.3807	0.3755	0.3808	0.3793	0.3802
6.0	0.3855	0.3818	0.3840	0.3835	0.3821	0.3845
6.5	0.3953	0.3823	0.3854	0.3825	0.3868	0.3894
7.0	0.4008	0.3996	0.3791	0.3726	0.3742	0.3993
7.5	0.3932	0.3955	0.4071	0.3793	0.4005	0.3919
8.0	0.3984	0.4333	0.4147	0.4482	0.3861	0.3611

WING PRESSURES (PSI)

z/d	r/d:	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.3935*						
3.875	0.3755+						
4.125	0.3653						
4.375	0.36731						
4.625	0.3908	0.3935					
4.875	0.3837	0.3830					
5.125	0.3915	0.4115					
5.375	0.3688	0.3799					
5.625	0.3797	0.3826					
5.875	0.3651	0.3682		0.3751			
6.125		0.3733	0.3851	0.3987	0.3615		
6.375	0.3979	0.3973	0.3902	0.3880	0.3910		
6.625	0.3801	0.4005	0.4005	0.4081	0.3964	0.3726	
6.875	0.3805	0.3848	0.4098	0.3983	0.4051	0.3623, 0.3791	
7.125	0.3851	0.3877	0.3883	0.3932	0.3838	0.3865	
7.375	0.3884	0.3894	0.3947	0.3973	0.3825	0.3809	0.3403

WHITE OAK LABORATORY

WTR1421
RUN 89

ALPH 4.93 deg

PIII 360.20 deg

PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)

TUNNEL T2 PRESSURE TEST

360.20 deg
AVERAGED DATA

P0 14.81 psia
SCALE FACTOR: 1.0000

10 112.64 degF

MACH 3.0

WTR1421
RUN 89

BODY PRESSURES (PSI)

z/d	theta:	375.2	390.2	405.2	420.2	435.2
0.5	0.9235					
1.0	0.7315					
1.5	0.5741					
2.0	0.4624	0.5505	0.5232	0.5002	0.4788	0.4650, 0.7678
2.5	0.4051	0.3730	0.3514	0.3390	0.3302	0.3720, 0.5810
3.0	0.3128					0.3350
3.5	0.3141	0.2984	0.2974	0.2996	0.3096	0.3109
4.0	0.3195	0.3055	0.3068	0.3143	0.3186	0.3272
4.3	0.3151	0.3069	0.3157	0.3119	0.3273	0.3261
4.5	0.3156	0.3030	0.3155	0.3137	0.3221	0.3343
4.8	0.3188	0.3101	0.3283	0.3206	0.3294	0.3312
5.0	0.3223	0.3253	0.3284	0.3422	0.3157	0.3625
5.5	0.3257	0.3277	0.3282	0.3344	0.3488	0.3783
6.0	0.3289	0.3275	0.3337	0.3400	0.3686	0.3869
6.5	0.3366	0.3201	0.3312	0.3508	0.3787	0.3917
7.0	0.3327	0.3368	0.3424	0.3579	0.3685	0.3998
7.5	0.3273	0.3373	0.3812	0.3690	0.3947	0.3947
8.0	0.3367	0.3733	0.3917	0.4260	0.3740	0.3694

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.3710*							
3.875	0.3520*							
4.125	0.3496							
4.375	0.35451	0.3663						
4.625	0.3834							
4.875	0.3774							
5.125	0.3888							
5.375	0.3707							
5.625	0.4167	0.3867						
5.875	0.3713							
6.125								
6.375	0.4053							
6.625	0.3882							
6.875	0.3868							
7.125	0.3913							
7.375	0.3964							
		0.3813	0.3813	0.3841	0.3826	0.3814	0.3814	0.3814
		0.3755	0.3755	0.3841	0.3826	0.3814	0.3814	0.3814
		0.4092	0.4092	0.3841	0.3826	0.3814	0.3814	0.3814
		0.3814	0.3814	0.3841	0.3826	0.3814	0.3814	0.3814
		0.3841	0.3841	0.3841	0.3826	0.3814	0.3814	0.3814
		0.3773	0.3773	0.3816	0.3719	0.3719	0.3719	0.3719
		0.3817	0.3817	0.3928	0.4020	0.4020	0.4020	0.4020
		0.4046	0.4046	0.3999	0.3961	0.3961	0.3961	0.3961
		0.4072	0.4072	0.4073	0.4155	0.4026	0.4026	0.4026
		0.3908	0.3908	0.4150	0.4047	0.4072	0.4072	0.4072
		0.3934	0.3934	0.3929	0.3988	0.3863	0.3886	0.3886
		0.3960	0.3960	0.4002	0.4023	0.3875	0.3857	0.3857
								0.3532

WTR1421
RUN 90

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH 9.97 deg PHI 360.20 deg PO 14.81 psia TO 112.64 degF MACH 3.0

AVERAGED DATA SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	360.2	375.2	390.2	405.2	420.2	435.2
0.5	0.8846						
1.0	0.6944						
1.5	0.5372						
2.0	0.4277		0.4745	0.4227	0.3938	0.3764	0.3757, 0.9818
2.5	0.3688		0.3058	0.2660	0.2607	0.2668	0.3046, 0.7533
3.0	0.2703						0.2821
3.5	0.2576						
4.0	0.2493						
4.3	0.2382						
4.5	0.2298						
4.8	0.2274						
5.0	0.2222						
5.5	0.2246						
6.0	0.2250						
6.5	0.2427						
7.0	0.2607						
7.5	0.2680						
8.0	0.2862						

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.3651*							
3.875	0.3462†							
4.125	0.3730†							
4.375	0.3806							
4.625	0.3991							
4.875	0.3914							
5.125	0.3793							
5.375	0.3568							
5.625	0.5160, 0.3712							
5.875	0.3498							
6.125								
6.375	0.3754							
6.625	0.3559							
6.875	0.3517							
7.125	0.3492							
7.375	0.3457							

WHITE OAK LABORATORY

WIR1421
RUN 9

ALPHI 0.03 deg PHI -1.1

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSIN1(PR/IO) PSIN2(TC/1)

PSI AVERAGED DATA P0 14.72 psia
SCALE FACTOR: 1.0000

MACII 4.0

z/d theta: -1.1

0.5	0.3170	13.9	28.9	43.9	58.9	73.9
1.0	0.2416					
1.5	0.1936	0.1826	0.1796	0.1813	0.1854	0.1776, 0.1724
2.0	0.1300					0.1374, 0.1463
2.5	0.1057	0.1144	0.1155	0.1160	0.1178	0.1123
3.0	0.1043					
3.5	0.0819	0.0902	0.0980	0.1024	0.0945	0.0938
4.0	0.0854	0.0937	0.0967	0.0915	0.0908	0.0818
4.3	0.0949	0.0969	0.0880	0.1048	0.0819	0.0902
4.5	0.0931	0.1007	0.1012	0.1011	0.0901	0.0852
4.8	0.0967	0.0979	0.0775	0.0976	0.0829	0.1052
5.0	0.0969	0.0791	0.0773	0.0768	0.1056	0.0879
5.5	0.0997	0.0922	0.1114	0.0936	0.0922	0.0950
6.0	0.0921	0.1029	0.0964	0.1001	0.1026	0.0968
6.5	0.0837	0.1028	0.1029	0.1075	0.0945	0.0998
7.0	0.0821	0.0855	0.1234	0.1363	0.1301	0.0965
7.5	0.0986	0.0948	0.0751	0.1247	0.0948	0.1151
8.0			0.1143		0.0892	0.0735

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1104+							
4.125								
4.375	0.11131	0.1195	0.1028	0.1132				
4.625			0.1191	0.0929				
4.875				0.1031				
5.125	0.1133			0.0982				
5.375	0.1049			0.1044				
5.625	0.1062, 0.1000		0.0983	0.1013				
5.875	0.1137		0.0981	0.0967	0.1029			
6.125			0.1121	0.0982				
6.375	0.0956		0.1070	0.1044	0.0928	0.1091		
6.625	0.1117		0.0966	0.1013	0.0999	0.0925		
6.875	0.1044		0.0957	0.0967	0.0899	0.0970	0.0997	
7.125	0.1066		0.1062	0.0950	0.0987	0.0943	0.0985, 0.0991	
7.375	0.1060		0.1011	0.1022	0.0957	0.1030	0.0996	
			0.0944	0.0920	0.0881	0.0983	0.0973	0.1043

WTR1421
RUN 10

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH 4.98 deg PHI -1.17 deg PO 14.72 psia TO 71.61 degF MACH 4.0

AVERAGED DATA SCALE FACTOR: 1.0000

WTR1421
RUN 10

BODY PRESSURES (PSI)

z/d	theta:	13.8	28.8	43.8	58.8	73.8
0.5	0.3153					
1.0	0.2400					
1.5	0.1924	0.1655	0.1495	0.1436	0.1423	0.1330, 0.2380
2.0	0.1270					0.1070, 0.1976
2.5	0.1020	0.1027	0.0982	0.0950	0.0955	0.0895
3.0	0.1016					
3.5	0.0756	0.0796	0.0863	0.0925	0.0847	0.0836
4.0	0.0774	0.0823	0.0854	0.0812	0.0807	0.0709
4.3	0.0868	0.0858	0.0766	0.0957	0.0715	0.0806
4.5	0.0856	0.0909	0.0923	0.0935	0.0803	0.0754
4.8	0.0883	0.0883	0.0677	0.0897	0.0750	0.0992
5.0	0.0877	0.0682	0.0683	0.0676	0.0985	0.0795
5.5	0.0876	0.0793	0.1012	0.0833	0.0818	0.0832
6.0	0.0787	0.0908	0.0854	0.0895	0.0925	0.0860
6.5	0.0705	0.0908	0.0925	0.0979	0.0850	0.0903
7.0	0.0712	0.0775	0.1165	0.1292	0.1239	0.0889
7.5	0.0941	0.0908	0.0711	0.1215	0.0916	0.1114
8.0			0.1256		0.0950	0.0925

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0962+							
4.125								
4.375	0.10391	0.1111						
4.625		0.0970						
4.875		0.1106						
5.125	0.1046							
5.375	0.0986	0.0932						
5.625	0.1260, 0.0947	0.0933			0.0994			
5.875	0.1085	0.1077	0.0946					
6.125		0.1035	0.1015		0.0899	0.1062		
6.375	0.0928	0.0940	0.0981		0.0976	0.0904		
6.625	0.1088	0.0934	0.0948		0.0882	0.0949	0.0973	
6.875	0.1029	0.1052	0.0945		0.0968	0.0931	0.0970, 0.1171	
7.125	0.1063	0.1017	0.1016		0.0949	0.1014	0.0980	
7.375	0.1047	0.0971	0.0942		0.0892	0.0977	0.0962	0.1022

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST					PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)				
WIR1421 RUN 11	ALPH	9.99 deg	PHI	-1.00 deg AVERAGED DATA	PU	14.72 psia SCALE FACTOR:	T0	71.58 degF	MACII
							1.0000		4.0
					BODY PRESSURES (PSI)				
					14.0	29.0	44.0	59.0	74.0
		theta:	-1.0						
	z/d								
	0.5		0.3064						
	1.0		0.2334						
	1.5		0.1865		0.1444	0.1197	0.1071	0.1090	0.1031, 0.3256
	2.0		0.1217						0.0874, 0.2670
	2.5		0.0970		0.0866	0.0759	0.0735	0.0777	0.0746
	3.0		0.0946						
	3.5		0.0663		0.0622	0.0702	0.0768	0.0699	0.0690
	4.0		0.0657		0.0625	0.0682	0.0651	0.0639	0.0524
	4.3		0.0737		0.0650	0.0592	0.0787	0.0543	0.0616
	4.5		0.0694		0.0678	0.0728	0.0739	0.0626	0.0552
	4.8		0.0711		0.0652	0.0485	0.0699	0.0544	0.0759
	5.0		0.0690		0.0459	0.0490	0.0482	0.0772	0.0566
	5.5		0.0684		0.0601	0.0824	0.0654	0.0629	0.0652
	6.0		0.0595		0.0745	0.0695	0.0732	0.0752	0.0693
	6.5		0.0536		0.0776	0.0790	0.0839	0.0696	0.0737
	7.0		0.0564		0.0637	0.1004	0.1130	0.1070	0.0733
	7.5		0.0765		0.0738	0.0548	0.1049	0.0765	0.0959
	8.0					0.0924		0.0735	0.0748

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0867+							
4.125								
4.375	0.09541	0.1025						
4.625			0.0909					
4.875			0.1025					
5.125				0.1059				
5.375	0.0929			0.0899				
5.625	0.0856			0.0997				
5.875	0.1645, 0.0793			0.0859	0.1010			
6.125	0.0916			0.0990				
6.375			0.0939	0.1031	0.0932	0.1079		
6.625	0.0753		0.0833	0.1001	0.1009	0.0942		
6.875	0.0888		0.0805	0.0966	0.0945	0.0994	0.1013	
7.125	0.0821		0.0891	0.0950	0.1028	0.0986	0.1018, 0.1513	
7.375	0.0845		0.0835	0.0977	0.1007	0.1064	0.1029	
	0.0847		0.0769	0.0885	0.0943	0.1045	0.1019	0.1067

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST					WTR1421				
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/11)					RUN 12				
ALPH	15.00 deg	PHI	-0.96 deg AVERAGED DATA	PO	14.71 psia SCALE FACTOR:	TO	71.70 degF	MACII	4.0
BODY PRESSURES (PSI)									
z/d	theta:		14.0	29.0	44.0	59.0	74.0		
0.5	0.2958	-1.0							
1.0	0.2274	0.2274							
1.5	0.1827	0.1827	0.1260	0.0937	0.0858	0.0960	0.0942, 0.4336		
2.0	0.1199	0.1199	0.0898	0.0987	0.1005	0.1034	0.1024, 0.3548		
2.5	0.0953	0.0953					0.0984		
3.0	0.1005	0.1005							
3.5	0.0816	0.0816	0.0947	0.1027	0.1062	0.0981	0.0973		
4.0	0.0836	0.0836	0.0967	0.0998	0.0942	0.0923	0.0823		
4.3	0.0939	0.0939	0.0998	0.0904	0.1072	0.0820	0.0908		
4.5	0.0941	0.0941	0.1052	0.1053	0.1043	0.0907	0.0853		
4.8	0.0978	0.0978	0.1028	0.0813	0.0999	0.0855	0.1087		
5.0	0.0991	0.0991	0.0836	0.0818	0.0793	0.1078	0.0904		
5.5	0.1017	0.1017	0.0951	0.1123	0.0954	0.0942	0.0971		
6.0	0.0973	0.0973	0.1081	0.1006	0.1037	0.1065	0.1014		
6.5	0.0945	0.0945	0.1124	0.1106	0.1150	0.1030	0.1082		
7.0	0.0972	0.0972	0.1000	0.1346	0.1455	0.1414	0.1079		
7.5	0.1146	0.1146	0.1092	0.0901	0.1372	0.1090	0.1278		
8.0				0.1233		0.1044	0.0997		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625									
3.875	0.1066+								
4.125									
4.375	0.10671	0.1108							
4.625									
4.875									
5.125	0.1103								
5.375	0.1055								
5.625	0.2232, 0.1021				0.1050				
5.875	0.1150								
6.125									
6.375	0.1047				0.0998	0.1136			
6.625	0.1182				0.1063	0.1021			
6.875	0.1134				0.1012	0.1072	0.1097		
7.125	0.1174				0.1098	0.1073	0.1116, 0.2002		
7.375	0.1255				0.1085	0.1146	0.1137		
					0.1040	0.1132	0.1152	0.1205	

WITTE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	-0.01 deg	PHI	21.37 deg AVERAGED DATA	PO	14.71 psia SCALE FACTOR:	TO	71.84 degF	MACH	4.0
BODY PRESSURES (PSI)									
z/d	theta:	21.4	36.4	51.4	66.4	81.4	96.4		
0.5	0.3141								
1.0	0.2398								
1.5	0.1929								
2.0	0.1286		0.1803	0.1771	0.1774	0.1835	0.1759, 0.1717		
2.5	0.1046		0.1124	0.1144	0.1154	0.1174	0.1365, 0.1476		
3.0	0.1035						0.1114		
3.5	0.0816		0.0900	0.0974	0.1017	0.0939	0.0926		
4.0	0.0850		0.0936	0.0966	0.0915	0.0900	0.0806		
4.3	0.0950		0.0970	0.0876	0.1049	0.0809	0.0898		
4.5	0.0945		0.1019	0.1024	0.1019	0.0898	0.0845		
4.8	0.0978		0.0994	0.0784	0.0985	0.0841	0.1070		
5.0	0.0981		0.0803	0.0788	0.0773	0.1066	0.0886		
5.5	0.0988		0.0916	0.1096	0.0932	0.0917	0.0936		
6.0	0.0919		0.1019	0.0955	0.0988	0.1013	0.0953		
6.5	0.0837		0.1021	0.1016	0.1059	0.0935	0.0983		
7.0	0.0821		0.0855	0.1219	0.1337	0.1283	0.0958		
7.5	0.0984		0.0943	0.0756	0.1228	0.0941	0.1139		
8.0				0.1131		0.0885	0.0737		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1071+							
4.125								
4.375	0.10821	0.1145	0.1017	0.8435	0.9685	1.0935	1.2185	1.3435
4.875			0.1143					
5.125								
5.375	0.1101							
5.625	0.1029							
5.875	0.1050, 0.0988							
6.125	0.1109				0.1003			
6.375								
6.625	0.0954				0.0918	0.1055		
6.875	0.1080				0.0981	0.0915	0.0972	
7.125	0.1017				0.0909	0.0956	0.0966, 0.0975	
7.375	0.1041				0.0978	0.0939	0.0960	
	0.1081				0.0944	0.0994	0.0939	0.0984
					0.0879	0.0957		

WHITE OAK LABORATORY

WTR1421
RUN 14

ALPH 5.00 deg PHI 21.5

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

21.46 deg P0 14.71 psia T0 71.88 degF MACH 4.0
AVERAGED DATA SCALE FACTOR: 1.0000

theta: 21.5

z/d

0.5	0.2774	36.5	51.5	66.5	81.5	96.5
1.0	0.2109					
1.5	0.1706	0.1465	0.1358	0.1332	0.1382	0.1318, 0.2253
2.0	0.1106					0.1069, 0.1885
2.5	0.0890	0.0922	0.0925	0.0926	0.0949	0.0890
3.0	0.0916					
3.5	0.0684	0.0766	0.0849	0.0895	0.0807	0.0769
4.0	0.0697	0.0782	0.0819	0.0769	0.0754	0.0642
4.3	0.0791	0.0809	0.0724	0.0904	0.0658	0.0745
4.5	0.0777	0.0859	0.0872	0.0875	0.0751	0.0694
4.8	0.0804	0.0829	0.0623	0.0835	0.0689	0.0931
5.0	0.0800	0.0628	0.0626	0.0616	0.0924	0.0742
5.5	0.0801	0.0738	0.0941	0.0774	0.0765	0.0799
6.0	0.0726	0.0843	0.0793	0.0834	0.0864	0.0822
6.5	0.0663	0.0868	0.0871	0.0921	0.0799	0.0862
7.0	0.0702	0.0750	0.1114	0.1233	0.1188	0.0867
7.5	0.0924	0.0873	0.0676	0.1159	0.0884	0.1086
8.0			0.1074		0.0909	0.0987

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0838+							
4.125								
4.375	0.08511	0.0917						
4.625		0.0784						
4.875		0.0888						
5.125	0.0978							
5.375	0.0909							
5.625	0.1059, 0.0867							
5.875	0.0980				0.0742			
6.125		0.0948						
6.375	0.0845	0.0869			0.0647	0.0789		
6.625	0.0978	0.0868			0.0743	0.0684		
6.875	0.0932	0.0958			0.0676	0.0713	0.0738	
7.125	0.0989	0.0941			0.0785	0.0695	0.0743, 0.0870	
7.375	0.1104	0.0916			0.0812	0.0768	0.0744	
					0.0802	0.0761	0.0753	0.0802

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	10.00 deg	PIII	21.57 deg AVERAGED DATA	P0	14.70 psia SCALE FACTOR:	T0	72.00 degF	MACH	4.0
BODY PRESSURES (PSI)									
z/d	theta:	21.6	36.6	51.6	66.6	81.6	96.6		
0.5	0.2370								
1.0	0.1789								
1.5	0.1447								
2.0	0.0902		0.1138	0.1017	0.1014	0.1090	0.1040,0.2926		
2.5	0.0698		0.0699	0.0733	0.0770	0.0812	0.0889,0.2413		
3.0	0.0736						0.0755		
3.5	0.0511		0.0635	0.0721	0.0766	0.0720	0.0719		
4.0	0.0515		0.0640	0.0681	0.0621	0.0637	0.0531		
4.3	0.0601		0.0660	0.0571	0.0740	0.0513	0.0616		
4.5	0.0559		0.0672	0.0689	0.0671	0.0581	0.0580		
4.8	0.0585		0.0641	0.0440	0.0624	0.0479	0.0802		
5.0	0.0591		0.0448	0.0440	0.0410	0.0700	0.0623		
5.5	0.0643		0.0590	0.0774	0.0599	0.0581	0.0718		
6.0	0.0599		0.0710	0.0646	0.0679	0.0704	0.0771		
6.5	0.0569		0.0744	0.0745	0.0799	0.0673	0.0845		
7.0	0.0561		0.0599	0.0948	0.1068	0.1035	0.0824		
7.5	0.0720		0.0663	0.0479	0.0952	0.0685	0.0941		
8.0				0.0891		0.0718	0.0857		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625									
3.875	0.0686+								
4.125									
4.375	0.07021	0.0732							
4.625			0.0612						
4.875			0.0692						
5.125	0.0851			0.0659					
5.375	0.0896			0.0505					
5.625	0.1350,0.0844			0.0575					
5.875	0.0928			0.0528	0.0581				
6.125			0.0877	0.0594					
6.375	0.0816		0.0833	0.0677	0.0500	0.0636			
6.625	0.0962		0.0860	0.0792	0.0599	0.0562			
6.875	0.0928		0.0963	0.0893	0.0543	0.0573	0.0601		
7.125	0.0954		0.0946	0.0979	0.0631	0.0565	0.0604,0.0896		
7.375	0.1034		0.0898	0.0934	0.0738	0.0641	0.0611		
					0.0828	0.0653	0.0650	0.0700	

WHITE OAK LABORATORY

WTR1421
RUN 16

WTR1421
RUN 16

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH	14.97 deg	PIII	21.57 deg	P0	14.70 psia	T0	72.09 degf	MACH	4.0
					SCALE FACTOR: 1.0000				
AVERAGED DATA									

BODY PRESSURES (PSI)

z/d	theta :	21.6	36.6	51.6	66.6	81.6	96.6
0.5		0.1979					
1.0		0.1490					
1.5		0.1205					
2.0		0.0732	0.0837	0.0744	0.0801	0.0894	0.0850, 0.3724
2.5		0.0564	0.0557	0.0636	0.0660	0.0703	0.0758, 0.3059
3.0		0.0666					0.0667
3.5		0.0459	0.0585	0.0652	0.0684	0.0652	0.0723
4.0		0.0518	0.0636	0.0665	0.0602	0.0636	0.0606
4.3		0.0641	0.0589	0.0589	0.0743	0.0526	0.0659
4.5		0.0657	0.0744	0.0748	0.0726	0.0612	0.0582
4.8		0.0714	0.0741	0.0537	0.0703	0.0559	0.0793
5.0		0.0741	0.0576	0.0560	0.0521	0.0799	0.0622
5.5		0.0786	0.0715	0.0883	0.0724	0.0712	0.0722
6.0		0.0774	0.0866	0.0796	0.0833	0.0874	0.0836
6.5		0.0805	0.0967	0.0943	0.0979	0.0899	0.0997
7.0		0.0906	0.0935	0.1250	0.1343	0.1337	0.1087
7.5		0.1092		0.0900	0.1336	0.1076	0.1270
8.0		0.1138		0.1293		0.1103	0.1093

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0828+							
4.125								
4.375	0.07791	0.0791						
4.625			0.0669					
4.875			0.0728					
5.125	0.0788			0.0701				
5.375	0.0777		0.0636	0.0571				
5.625	0.1631, 0.0806		0.0691	0.0672	0.0653			
5.875	0.0984		0.0884	0.0657				
6.125			0.0958	0.0815	0.0645	0.0745		
6.375	0.1019		0.1017	0.0931	0.0748	0.0671		
6.625	0.1194		0.1147	0.1090	0.0851	0.0732	0.0731	
6.875	0.1189		0.1309	0.1292	0.1118	0.0825	0.0760, 0.1030	
7.125	0.1234		0.1273	0.1402	0.1303	0.1071	0.0813	
7.375	0.1189		0.1172	0.1286	0.1358	0.1286	0.0957	0.0841

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST					WTR1421				
PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)					RUN 17				
ALPH	0.01 deg	PHI	44.39 deg	P0	14.69 psia	TO	72.14 degF	MACH	4.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	59.4	74.4	89.4	104.4	119.4			
0.5	0.3113								
1.0	0.2379								
1.5	0.1913								
2.0	0.1277	0.1787	0.1754	0.1757	0.1822	0.1755, 0.1720			
2.5	0.1036	0.1109	0.1136	0.1149	0.1170	0.1362, 0.1481			
3.0	0.1027					0.1110			
3.5	0.0822	0.0901	0.0964	0.1005	0.0929	0.0916			
4.0	0.0851	0.0933	0.0964	0.0915	0.0900	0.0808			
4.3	0.0950	0.0969	0.0878	0.1038	0.0809	0.0895			
4.5	0.0942	0.1060	0.1020	0.1013	0.0896	0.0842			
4.8	0.0977	0.0991	0.0790	0.0980	0.0839	0.1063			
5.0	0.0978	0.0785	0.0792	0.0777	0.1059	0.0885			
5.5	0.0981	0.0914	0.1084	0.0927	0.0913	0.0938			
6.0	0.0916	0.1011	0.0951	0.0981	0.1003	0.0945			
6.5	0.0844	0.1021	0.1008	0.1048	0.0930	0.0970			
7.0	0.0835	0.0851	0.1214	0.1327	0.1263	0.0952			
7.5	0.1022	0.0983	0.0804	0.1256	0.0970	0.1144			
8.0			0.1187		0.0955	0.0918			
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625									
3.875	0.1049+								
4.125									
4.375	0.09591	0.1121							
4.625			0.1007						
4.875			0.1111						
5.125	0.1080			0.1065					
5.375	0.1011		0.0958	0.0910					
5.625	0.1037, 0.0974		0.0954	0.0999	0.0978				
5.875	0.1088		0.1086	0.0958					
6.125			0.1032	0.1014	0.0908	0.1011			
6.375	0.0950		0.0950	0.0977	0.0963	0.0902			
6.625	0.1055		0.0945	0.0954	0.0903	0.0939	0.0947		
6.875	0.1000		0.1012	0.0948	0.0962	0.0927	0.0943, 0.0966		
7.125	0.1022		0.0969	0.0978	0.0929	0.0973	0.0947		
7.375	0.1090		0.0929	0.0911	0.0878	0.0959	0.0959	0.1021	

WHITE OAK LABORATORY

WTR1421
RUN 18

ALPH 5.00 deg PHI 44.4

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

44.35 deg PO 14.69 psia TO 72.30 degF MACH 4.0
AVERAGED DATA SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	59.4	74.4	89.4	104.4	119.4
0.5	0.2485					
1.0	0.1891					
1.5	0.1542	0.1354	0.1292	0.1312	0.1373	0.1332, 0.2026
2.0	0.1001					0.1070, 0.1713
2.5	0.0817	0.0881	0.0912	0.0923	0.0942	0.0885
3.0	0.0876					
3.5	0.0671	0.0764	0.0842	0.0878	0.0765	0.0719
4.0	0.0686	0.0778	0.0811	0.0757	0.0715	0.0607
4.3	0.0776	0.0805	0.0715	0.0885	0.0620	0.0695
4.5	0.0756	0.0839	0.0851	0.0848	0.0704	0.0638
4.8	0.0782	0.0810	0.0611	0.0807	0.0630	0.0840
5.0	0.0778	0.0612	0.0605	0.0594	0.0852	0.0646
5.5	0.0784	0.0723	0.0907	0.0751	0.0712	0.0689
6.0	0.0706	0.0814	0.0762	0.0803	0.0825	0.0705
6.5	0.0640	0.0817	0.0824	0.0878	0.0758	0.0765
7.0	0.0694	0.0730	0.1069	0.1177	0.1106	0.0769
7.5	0.0893	0.0845	0.0667	0.1120	0.0824	0.1026
8.0			0.1050		0.1007	0.1106

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0667+							
4.125								
4.375	0.06731	0.0743						
4.625			0.0608					
4.875			0.0675					
5.125	0.0891			0.0652				
5.375	0.0815			0.0498				
5.625	0.0938, 0.0764			0.0566	0.0560			
5.875	0.0866			0.0521				
6.125				0.0571	0.0482	0.0616		
6.375	0.0753			0.0636	0.0591	0.0552		
6.625	0.0859			0.0768	0.0531	0.0570		
6.875	0.0814			0.0833	0.0586	0.0551	0.0598	
7.125	0.0867			0.0814	0.0577	0.0623	0.0602, 0.0730	
7.375	0.0913			0.0807	0.0584	0.0663	0.0606	
							0.0669	0.0728

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	10.01 deg	PIII	44.34 deg AVERAGED DATA	PO	14.70 psia SCALE FACTOR:	TO	72.39 degF	MACH	4.0
BODY PRESSURES (PSI)									
z/d	theta:	44.3	59.3	74.3	89.3	104.3	119.3		
0.5	0.1919								
1.0	0.1452								
1.5	0.1199		0.1031	0.0999	0.1020	0.1084	0.1025, 0.2367		
2.0	0.0745						0.0856, 0.1977		
2.5	0.0612		0.0712	0.0761	0.0789	0.0803	0.0723		
3.0	0.0738								
3.5	0.0544		0.0636	0.0718	0.0805	0.0670	0.0532		
4.0	0.0535		0.0625	0.0651	0.0667	0.0608	0.0485		
4.3	0.0620		0.0640	0.0537	0.0793	0.0482	0.0527		
4.5	0.0592		0.0660	0.0650	0.0741	0.0527	0.0431		
4.8	0.0622		0.0632	0.0418	0.0696	0.0440	0.0630		
5.0	0.0630		0.0451	0.0425	0.0491	0.0662	0.0449		
5.5	0.0660		0.0592	0.0751	0.0667	0.0548	0.0513		
6.0	0.0600		0.0698	0.0646	0.0751	0.0650	0.0534		
6.5	0.0553		0.0722	0.0731	0.0820	0.0604	0.0585		
7.0	0.0570		0.0604	0.0939	0.1066	0.0977	0.0636		
7.5	0.0714		0.0669	0.0502	0.0973	0.0777	0.1013		
8.0				0.0901		0.0825	0.1062		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625									
3.875	0.0498+								
4.125									
4.375	0.05441	0.0533							
4.625			0.0426						
4.875			0.0470						
5.125	0.0710			0.0457					
5.375	0.0631			0.0340					
5.625	0.0776, 0.0579			0.0409					
5.875	0.0673			0.0604	0.0398				
6.125			0.0572	0.0445	0.0355	0.0469			
6.375	0.0611		0.0550	0.0495	0.0463	0.0443			
6.625	0.0719		0.0592	0.0502	0.0433	0.0453			
6.875	0.0694		0.0636	0.0471	0.0474	0.0467	0.0477		
7.125	0.0787		0.0641	0.0559	0.0493	0.0546	0.0502, 0.0661		
7.375	0.0939		0.0666	0.0548	0.0505	0.0578	0.0514		
							0.0583	0.0642	

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST					WTR1421				
PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)					RUN 20				
ALPH	14.97 deg	PHI	44.52 deg	PO	14.69 psia	TO	72.58 degF	MACH	4.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	59.5	74.5	89.5	104.5	119.5			
0.5	0.1420								
1.0	0.1066								
1.5	0.0889								
2.0	0.0552	0.0790	0.0795	0.0839	0.0873	0.0800, 0.2775			
2.5	0.0490	0.0585	0.0634	0.0717	0.0681	0.0696, 0.2301			
3.0	0.0657					0.0626			
3.5	0.0466	0.0546	0.0598	0.0775	0.0633	0.0452			
4.0	0.0491	0.0553	0.0572	0.0632	0.0486	0.0297			
4.3	0.0588	0.0588	0.0495	0.0747	0.0365	0.0366			
4.5	0.0585	0.0636	0.0640	0.0689	0.0439	0.0313			
4.8	0.0622	0.0626	0.0437	0.0642	0.0373	0.0511			
5.0	0.0634	0.0458	0.0452	0.0454	0.0591	0.0361			
5.5	0.0674	0.0605	0.0767	0.0632	0.0519	0.0498			
6.0	0.0650	0.0739	0.0686	0.0740	0.0677	0.0588			
6.5	0.0627	0.0779	0.0789	0.0855	0.0688	0.0693			
7.0	0.0660	0.0688	0.0998	0.1120	0.1065	0.0740			
7.5	0.0845	0.0790	0.0618	0.1054	0.0807	0.0954			
8.0			0.0977		0.0819	0.0820			

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0555+							
4.125								
4.375	0.05521	0.0590						
4.625			0.0499					
4.875			0.0540					
5.125	0.0624			0.0510				
5.375	0.0621			0.0400				
5.625	0.0662, 0.0638			0.0489				
5.875	0.0746			0.0464	0.0471			
6.125				0.0585	0.0445	0.0556		
6.375	0.0802			0.0615	0.0504	0.0504		
6.625	0.0939			0.0634	0.0524	0.0510	0.0554	
6.875	0.0924			0.0705	0.0607	0.0516	0.0566, 0.0568	
7.125	0.1007			0.0813	0.0637	0.0588	0.0553	
7.375	0.1082			0.0838	0.0684	0.0625	0.0581	0.0629

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST					WTR1421				
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)					RUN 21				
ALPH	-0.05 deg	PHI	66.73 deg AVERAGED DATA	P0	14.69 psia SCALE FACTOR:	T0	72.74 degf	MAC1	4.0
BODY PRESSURES (PSI)									
z/d	theta:	66.7	81.7	96.7	111.7	126.7	141.7		
0.5	0.3085								
1.0	0.2354								
1.5	0.1885								
2.0	0.1263		0.1772	0.1743	0.1754	0.1812	0.1749, 0.1714		
2.5	0.1033		0.1098	0.1128	0.1141	0.1161	0.1360, 0.1470		
3.0	0.1018						0.1106		
3.5	0.0807		0.0883	0.0958	0.0993	0.0925	0.0909		
4.0	0.0839		0.0917	0.0945	0.0899	0.0884	0.0796		
4.3	0.0932		0.0950	0.0864	0.1021	0.0799	0.0878		
4.5	0.0939		0.1008	0.1012	0.1007	0.0881	0.0835		
4.8	0.0972		0.0988	0.0799	0.0977	0.0842	0.1051		
5.0	0.0975		0.0814	0.0798	0.0784	0.1048	0.0884		
5.5	0.0967		0.0903	0.1061	0.0917	0.0904	0.0940		
6.0	0.0909		0.0994	0.0937	0.0968	0.0986	0.0931		
6.5	0.0842		0.0999	0.0995	0.1029	0.0921	0.0955		
7.0	0.0838		0.0872	0.1191	0.1296	0.1238	0.0945		
7.5	0.1032		0.0990	0.0823	0.1246	0.0979	0.1144		
8.0				0.1193		0.0995	0.1072		

WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625									
3.875	0.1031+								
4.125									
4.375	0.10471	0.1088							
4.625			0.0990						
4.875			0.1085						
5.125									
5.375	0.1059								
5.625	0.0990		0.0936						
5.875	0.1018, 0.0958		0.0939						
6.125	0.1056		0.1043		0.0952				
6.375			0.1004		0.0899				
6.625	0.0943		0.0965		0.0951	0.0990			
6.875	0.1031		0.0947		0.0921	0.0898			
7.125	0.0990		0.1014		0.1014	0.0970			
7.375	0.1031		0.1000		0.1029	0.1037	0.1021		
7.625	0.1056		0.0976		0.1019	0.1156	0.1174, 0.1654		
7.875						0.1250	0.1289		
8.125							0.1371		
8.375								0.1253	

WHITE OAK LABORATORY									
WTR1421 RUN 22		TUNNEL T2 PRESSURE TEST							
		PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)				WTR1421 RUN 22			
ALPH	4.96 deg	PHI	66.74 deg	P0	14.69 psia	T0	72.83 degF	MACH	4.0
		AVERAGED DATA							
		SCALE FACTOR: 1.0000							
		BODY PRESSURES (PSI)							
z/d	theta:	81.7	96.7	111.7	126.7	141.7			
0.5	0.2317								
1.0	0.1770								
1.5	0.1455								
2.0	0.0959	0.1314	0.1282	0.1321	0.1411	0.1417, 0.1775			
2.5	0.0798	0.0878	0.0904	0.0914	0.0940	0.1118, 0.1510			
3.0	0.0879					0.0909			
3.5	0.0685	0.0771	0.0834	0.0857	0.0740	0.0685			
4.0	0.0698	0.0787	0.0807	0.0738	0.0701	0.0596			
4.3	0.0788	0.0813	0.0715	0.0850	0.0597	0.0661			
4.5	0.0763	0.0829	0.0841	0.0803	0.0668	0.0605			
4.8	0.0790	0.0813	0.0619	0.0759	0.0583	0.0795			
5.0	0.0787	0.0663	0.0615	0.0557	0.0786	0.0618			
5.5	0.0791	0.0736	0.0919	0.0708	0.0640	0.0668			
6.0	0.0720	0.0827	0.0794	0.0771	0.0715	0.0641			
6.5	0.0637	0.0829	0.0855	0.0859	0.0649	0.0661			
7.0	0.0631	0.0697	0.1033	0.1135	0.0976	0.0651			
7.5	0.0819	0.0799	0.0611	0.1011	0.0738	0.0935			
8.0			0.1075		0.1170	0.1398			
		WING PRESSURES (PSI)							
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625	0.0578+								
3.875									
4.125									
4.375	0.04431	0.0635							
4.625									
4.875									
5.125	0.0835								
5.375	0.0764								
5.625	0.0763, 0.0712								
5.875	0.0795								
6.125									
6.375	0.0703								
6.625	0.0787								
6.875	0.0730								
7.125	0.0776								
7.375	0.0855								
		0.0523	0.0576	0.0551	0.0473	0.0544	0.0599	0.0614, 0.1014	
				0.0418	0.0430	0.0529	0.0629	0.0723	0.0774
				0.0485	0.0542	0.0582			
				0.0666	0.0524	0.0612			
				0.0685	0.0621	0.0688			
				0.0673	0.0655	0.0727			
				0.0673	0.0701				
				0.0696					
				0.0741					
				0.0728					
				0.0753					

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSIN1(PR/10) PSIN2(C/1)									
ALPH	9.97 deg	PHI	66.83 deg	P0	14.70 psia	T0	73.11 degF	MACH	4.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	81.8	96.8	111.8	126.8	141.8			
0.5	0.1730								
1.0	0.1343								
1.5	0.1148								
2.0	0.0754								
2.5	0.0644								
3.0	0.0765								
3.5	0.0548								
4.0	0.0528								
4.3	0.0598								
4.5	0.0552								
4.8	0.0569								
5.0	0.0559								
5.5	0.0561								
6.0	0.0489								
6.5	0.0434								
7.0	0.0478								
7.5	0.0669								
8.0									
		0.1033	0.1004	0.1006	0.1077	0.1089, 0.1797			
		0.0732	0.0764	0.0763	0.0757	0.0862, 0.1534			
		0.0663	0.0741	0.0709	0.0589	0.0684			
		0.0653	0.0700	0.0568	0.0570	0.0463			
		0.0673	0.0612	0.0689	0.0467	0.0181			
		0.0678	0.0736	0.0626	0.0457	0.0255			
		0.0635	0.0517	0.0571	0.0435	0.0226			
		0.0443	0.0516	0.0354	0.0418	0.0418			
		0.0577	0.0798	0.0486	0.0429	0.0249			
		0.0694	0.0644	0.0521	0.0480	0.0346			
		0.0675	0.0684	0.0575	0.0518	0.0351			
		0.0523	0.0864	0.0834	0.0385	0.0421			
		0.0635	0.0491	0.0855	0.0743	0.0491			
			0.1141		0.0630	0.0771			
					0.1096	0.1032			
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625									
3.875	0.0402+								
4.125									
4.375	0.04191	0.0441							
4.625									
4.875									
5.125	0.0461								
5.375	0.0437								
5.625	0.0454, 0.0432								
5.875	0.0514								
6.125									
6.375	0.0486								
6.625	0.0757								
6.875	0.0655								
7.125	0.0634								
7.375	0.0711								
		0.0350	0.0382	0.0387	0.0359	0.0431	0.0449	0.0470, 0.0655	
				0.0307		0.0421	0.0479	0.0539	0.0585
				0.0374		0.0431			
				0.0347		0.0447			
				0.0406		0.0517			
				0.0452		0.0546			
				0.0481					
				0.0437					
				0.0555					
				0.0655					
				0.0618					

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)									
ALPH	14.96 deg	PHI	66.75 deg	P0	14.70 psia	TO	73.25 degF	MACH	4.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	66.8	81.8	96.8	111.8	126.8	141.8		
0.5	0.1306								
1.0	0.1045								
1.5	0.0929		0.0835	0.0809	0.0790	0.0816	0.0790, 0.1848		
2.0	0.0599						0.0626, 0.1572		
2.5	0.0493		0.0584	0.0644	0.0624	0.0633	0.0530		
3.0	0.0620								
3.5	0.0404		0.0557	0.0654	0.0549	0.0458	0.0312		
4.0	0.0374		0.0531	0.0546	0.0415	0.0308	0.0174		
4.3	0.0445		0.0531	0.0463	0.0483	0.0166	0.0244		
4.5	0.0407		0.0546	0.0580	0.0398	0.0211	0.0191		
4.8	0.0443		0.0513	0.0363	0.0338	0.0114	0.0339		
5.0	0.0447		0.0326	0.0332	0.0128	0.0301	0.0168		
5.5	0.0465		0.0450	0.0616	0.0273	0.0204	0.0233		
6.0	0.0433		0.0547	0.0494	0.0305	0.0276	0.0235		
6.5	0.0383		0.0561	0.0521	0.0351	0.0215	0.0260		
7.0	0.0371		0.0423	0.0704	0.0585	0.0496	0.0232		
7.5	0.0491		0.0462	0.0306	0.0535	0.0241	0.0394		
8.0				0.0551		0.0409	0.0369		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0431+							
4.125								
4.375	0.04371	0.0479	0.0397	0.0410	0.0340	0.0378	0.0389	0.0392, 0.0435
4.625			0.0405				0.0377	0.0384
4.875							0.0425	0.0451
5.125	0.0350		0.0253	0.0295				
5.375	0.0311		0.0277	0.0324				
5.625	0.0362, 0.0294		0.0372	0.0287				
5.875	0.0381		0.0325	0.0339	0.0273	0.0378		
6.125			0.0389	0.0399	0.0380	0.0371		
6.375	0.0461		0.0412	0.0397	0.0372	0.0372		
6.625	0.0400		0.0418	0.0362	0.0394	0.0377		
6.875	0.0434		0.0433	0.0418	0.0385	0.0419		
7.125	0.0496		0.0410	0.0379	0.0366	0.0425		
7.375								

WTR1421
RUN 25

ALPH -0.04 deg PHI 89.46 deg
AVERAGED DATA

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

TUNNEL 12 PRESSURE TEST

PO 14.68 psia
SCALE FACTOR: 1.0000

TO 73.55 degF

MACH 4.0

WTR1421
RUN 25

WHITE OAK LABORATORY

BODY PRESSURES (PSI)

z/d	theta:	104.5	119.5	134.5	149.5	164.5
0.5	89.5					
1.0	0.3055					
1.5	0.2330					
2.0	0.1866	0.1754	0.1737	0.1743	0.1812	0.1751, 0.1710
2.5	0.1257					0.1359, 0.1454
3.0	0.1029	0.1093	0.1122	0.1137	0.1157	0.1108
3.5	0.1007					
4.0	0.0808	0.0882	0.0954	0.0986	0.0918	0.0904
4.5	0.0839	0.0917	0.0942	0.0901	0.0885	0.0803
5.0	0.0929	0.0946	0.0864	0.1014	0.0805	0.0879
5.5	0.0923	0.0985	0.0997	0.0988	0.0879	0.0838
6.0	0.0955	0.0968	0.0793	0.0963	0.0831	0.1031
6.5	0.0962	0.0802	0.0787	0.0779	0.1026	0.0874
7.0	0.0904	0.0902	0.1054	0.0913	0.0901	0.0926
7.5	0.0842	0.0986	0.0935	0.0964	0.0980	0.0928
8.0	0.1022	0.0993	0.0990	0.1023	0.0918	0.0951
		0.0875	0.1175	0.1274	0.1229	0.0953
		0.0981	0.0829	0.1236	0.0994	0.1199
			0.1187		0.1053	0.1181

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1033+							
4.125								
4.375	0.10481	0.1091						
4.625			0.0994					
4.875			0.1084					
5.125	0.1057			0.1039				
5.375	0.0981		0.0934	0.0898				
5.625	0.0999, 0.0953		0.0939	0.0964				
5.875			0.1033	0.0942	0.0948			
6.125	0.1044		0.0997	0.0987				
6.375	0.0946		0.0949	0.0974	0.0898	0.0990		
6.625	0.1041		0.0976	0.0974	0.0973	0.0979		
6.875	0.1034		0.1081	0.1003	0.1007	0.1184	0.1436	
7.125	0.1111		0.1095	0.1134	0.1155	0.1417	0.1730, 0.1506	
7.375	0.1227		0.1099	0.1161	0.1299	0.1719	0.1859	
					0.1529	0.1884	0.1922	0.1996

AD-A190 972

SURFACE PRESSURE MEASUREMENTS ON A HIGHLY SWEPT DELTA
MINIBED WIND TUNNEL. (U) NAVAL SURFACE WEAPONS CENTER
SILVER SPRING MD A S COLLIER ET AL. AUG 86

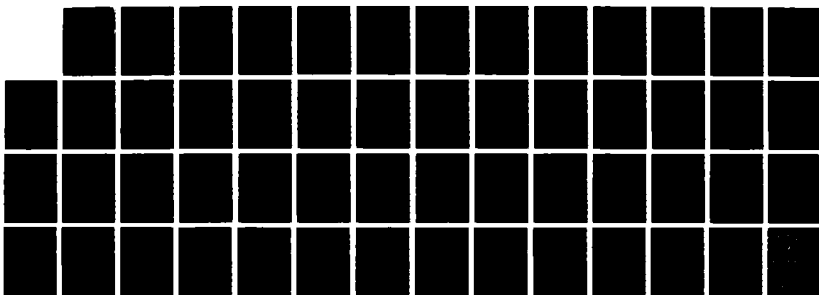
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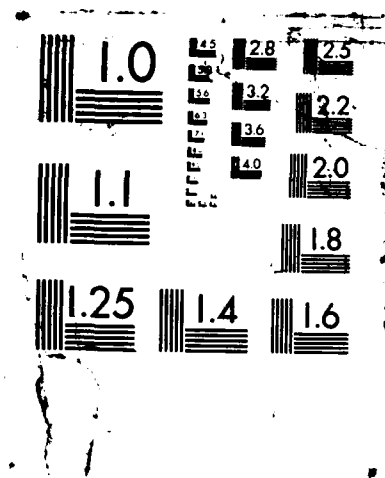
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WHITE OAK LABORATORY

WTR1421
RUN 26TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

MACH 4.0

TO 75.04 degF
SCALE FACTOR: 1.0000

PO 14.66 psia

89.47 deg
AVERAGED DATA

PHI

4.97 deg

ALPH

BODY PRESSURES (PSI)

z/d	theta:	89.5	104.5	119.5	134.5	149.5	164.5
0.5		0.2245					
1.0		0.1728					
1.5		0.1450					
2.0		0.0943	0.1307	0.1299	0.1361	0.1519	0.1569, 0.1519
2.5		0.0774	0.0863	0.0898	0.0924	0.0982	0.1224, 0.1353
3.0		0.0902					0.0981
3.5		0.0696	0.0766	0.0830	0.0850	0.0726	0.0682
4.0		0.0708	0.0786	0.0796	0.0732	0.0696	0.0583
4.3		0.0797	0.0806	0.0704	0.0847	0.0595	0.0639
4.5		0.0776	0.0826	0.0820	0.0798	0.0670	0.0576
4.8		0.0805	0.0799	0.0600	0.0750	0.0587	0.0760
5.0		0.0803	0.0619	0.0583	0.0556	0.0783	0.0595
5.5		0.0819	0.0728	0.0855	0.0689	0.0652	0.0651
6.0		0.0766	0.0823	0.0717	0.0731	0.0724	0.0666
6.5		0.0722	0.0841	0.0769	0.0793	0.0663	0.0710
7.0		0.0721	0.0742	0.0934	0.1012	0.0989	0.0733
7.5		0.0838	0.0808	0.0635	0.1044	0.0901	0.1121
8.0				0.1239		0.1541	0.1846

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0554+							
4.125								
4.375	0.05361 0.0574							
4.625		0.0519						
4.875		0.0535						
5.125	0.0677							
5.375	0.0664							
5.625	0.0687, 0.0657							
5.875	0.0747							
6.125		0.0529						
6.375	0.0704	0.0556				0.0584		
6.625	0.0765	0.0587				0.0605		
6.875	0.0753	0.0652				0.0689		
7.125	0.0830	0.0810				0.0782	0.0698	
7.375	0.1027	0.0899				0.0841	0.0768, 0.0685	
		0.0998				0.0915	0.0819	
						0.0908	0.0892	0.0970

WTR1421
RUN 27

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH 9.99 deg PHII 89.50 deg P0 14.66 psia T0 75.35 degf MACH 4.0

AVERAGED DATA SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	104.5	119.5	134.5	149.5	164.5
0.5	0.1671					
1.0	0.1337					
1.5	0.1161					
2.0	0.0770	0.1022	0.0986	0.1034	0.1198	0.1348, 0.1314
2.5	0.0650	0.0717	0.0732	0.0720	0.0748	0.1040, 0.1175
3.0	0.0794					0.0805
3.5	0.0605	0.0621	0.0669	0.0671	0.0553	0.0540
4.0	0.0640	0.0615	0.0599	0.0563	0.0536	0.0412
4.3	0.0733	0.0621	0.0505	0.0670	0.0436	0.0421
4.5	0.0716	0.0613	0.0606	0.0614	0.0508	0.0317
4.8	0.0755	0.0574	0.0389	0.0572	0.0428	0.0470
5.0	0.0773	0.0397	0.0366	0.0376	0.0605	0.0287
5.5	0.0786	0.0534	0.0616	0.0501	0.0477	0.0361
6.0	0.0673	0.0678	0.0497	0.0537	0.0538	0.0348
6.5	0.0564	0.0653	0.0559	0.0604	0.0460	0.0411
7.0	0.0529	0.0522	0.0724	0.0841	0.0730	0.0483
7.5	0.0660	0.0599	0.0459	0.0924	0.0773	0.0808
8.0			0.1000		0.1408	0.1319

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0393+							
4.125								
4.375	0.04041	0.0415						
4.625			0.0358					
4.875			0.0351					
5.125	0.0384			0.0366				
5.375	0.0358			0.0314				
5.625	0.0372, 0.0364			0.0363				
5.875	0.0447			0.0358	0.0349			
6.125				0.0410	0.0351	0.0413		
6.375	0.0480			0.0445	0.0436	0.0436		
6.625	0.0527			0.0473	0.0465	0.0449	0.0453	
6.875	0.0520			0.0492	0.0519	0.0503	0.0498, 0.0461	
7.125	0.0598			0.0596	0.0589	0.0607	0.0579	
7.375	0.0710			0.0675	0.0676	0.0702	0.0702	0.0711

WHITE OAK LABORATORY

WTR1421
RUN 28

ALPH 14.94 deg PHI 89.66 deg PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

TUNNEL T2 PRESSURE TEST

PD 14.66 psia TO 75.64 degF MACH 4.0

SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	104.7	119.7	134.7	149.7	164.7
0.5	0.1317					
1.0	0.1076					
1.5	0.0971					
2.0	0.0676	0.0825	0.0763	0.0738	0.0911	0.1156, 0.1142
2.5	0.0624	0.0598	0.0624	0.0619	0.0604	0.0889, 0.1029
3.0	0.0800					0.0687
3.5	0.0647	0.0557	0.0587	0.0620	0.0547	0.0451
4.0	0.0626	0.0570	0.0569	0.0555	0.0558	0.0228
4.3	0.0692	0.0611	0.0499	0.0676	0.0448	0.0287
4.5	0.0662	0.0639	0.0630	0.0649	0.0463	0.0235
4.8	0.0678	0.0624	0.0445	0.0611	0.0359	0.0400
5.0	0.0670	0.0458	0.0430	0.0433	0.0513	0.0255
5.5	0.0639	0.0538	0.0647	0.0527	0.0368	0.0327
6.0	0.0559	0.0591	0.0522	0.0535	0.0415	0.0341
6.5	0.0483	0.0574	0.0553	0.0558	0.0353	0.0378
7.0	0.0473	0.0459	0.0674	0.0727	0.0626	0.0388
7.5	0.0626	0.0527	0.0345	0.0671	0.0422	0.0568
8.0			0.0693		0.0534	0.0515

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0423+							
4.125								
4.375	0.04281	0.0446						
4.625		0.0408						
4.875		0.0395						
5.125	0.0438			0.0414				
5.375	0.0394			0.0340				
5.625	0.0595, 0.0380	0.0364		0.0367				
5.875	0.0426	0.0432		0.0344	0.0368			
6.125		0.0412		0.0395	0.0355	0.0416		
6.375	0.0451	0.0408		0.0422	0.0406	0.0421		
6.625	0.0476	0.0462		0.0434	0.0436	0.0425	0.0447	
6.875	0.0457	0.0489		0.0438	0.0451	0.0445	0.0465, 0.0592	
7.125	0.0511	0.0498		0.0490	0.0471	0.0494	0.0479	
7.375	0.0553	0.0518		0.0492	0.0479	0.0520	0.0528	0.0550

WTR1421
RUN 30

TUNNEL T2 PRESSURE TEST

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPHI	4.98 deg	PHI	112.33 deg	P0	14.65 psia	T0	76.45 degF	MACH	4.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									

P0	14.65 psia	T0	76.45 degF
SCALE FACTOR: 1.0000			
112.33 deg			
AVERAGED DATA			

14.65 psia
SCALE FACTOR:

BODY PRESSURES (PSI)

z/d	theta:	112.3	127.3	142.3	157.3	172.3	187.3
0.5		0.2270					
1.0		0.1728					
1.5		0.1420					
2.0		0.0958					
2.5		0.0796					
3.0		0.0863					
3.5		0.0694					
4.0		0.0707					
4.5		0.0778					
4.5		0.0762					
4.8		0.0787					
5.0		0.0787					
5.5		0.0779					
6.0		0.0720					
6.5		0.0661					
7.0		0.0676					
7.5		0.0819					
8.0							

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0643†							
4.125								
4.375	0.06181	0.0659						
4.625		0.0593						
4.875		0.0633						
5.125				0.0588				
5.375	0.0703		0.0495	0.0475				
5.625	0.0665		0.0497	0.0519				
5.875	0.0680		0.0573	0.0511				
6.125	0.0755		0.0578	0.0594				
6.375			0.0578	0.0578	0.0545	0.0612		
6.625	0.0729		0.0598	0.0632	0.0632	0.0653		
6.875	0.0802		0.0676	0.0677	0.0707	0.0830	0.0915	
7.125	0.0821		0.0851	0.0810	0.0896	0.1028	0.1153, 0.0554	
7.375	0.0948		0.1033	0.1029	0.1080	0.1200	0.1286	
7.625	0.0948		0.1033	0.1029	0.1080	0.1200	0.1286	
7.875	0.1247		0.1270	0.1217	0.1222	0.1290	0.1409	0.1756

WHITE OAK LABORATORY

WTR1421 RUN 31		TUNNEL T2 PRESSURE TEST		WTR1421 RUN 31	
		PS1 CONFIGURATION		PSI#1(PR/10) PSI#2(TC/1)	
ALPH	9.98 deg	PHI	112.42 deg	PO	14.65 psia
		AVERAGED DATA		SCALE FACTOR:	
				TO	1.0000
				76.73 degF	
				MACH	4.0

BODY PRESSURES (PSI)

z/d	theta:	112.4	127.4	142.4	157.4	172.4	187.4
0.5	0.1697						
1.0	0.1317						
1.5	0.1113						
2.0	0.0759		0.1020	0.1062	0.1229	0.1528	0.1801, 0.1035
2.5	0.0649		0.0679	0.0688	0.0760	0.0924	0.1376, 0.0932
3.0	0.0737						0.1097
3.5	0.0550		0.0598	0.0637	0.0617	0.0601	0.0723
4.0	0.0528		0.0594	0.0607	0.0544	0.0543	0.0567
4.3	0.0584		0.0606	0.0529	0.0631	0.0445	0.0604
4.5	0.0544		0.0610	0.0625	0.0591	0.0505	0.0546
4.8	0.0558		0.0586	0.0441	0.0570	0.0452	0.0689
5.0	0.0554		0.0434	0.0431	0.0416	0.0621	0.0528
5.5	0.0542		0.0508	0.0654	0.0532	0.0534	0.0538
6.0	0.0490		0.0574	0.0550	0.0574	0.0607	0.0499
6.5	0.0459		0.0594	0.0612	0.0643	0.0600	0.0529
7.0	0.0517		0.0546	0.0792	0.0879	0.0922	0.0628
7.5	0.0733		0.0678	0.0613	0.1299	0.1307	0.1117
8.0				0.1477		0.1848	0.1749

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0476+							
4.125								
4.375	0.0469†	0.0497						
4.625			0.0443					
4.875			0.0456					
5.125	0.0458			0.0429				
5.375	0.0402		0.0368	0.0361				
5.625	0.0381, 0.0406		0.0405	0.0428	0.0419			
5.875	0.0490		0.0480	0.0422				
6.125			0.0447	0.0463	0.0429	0.0489		
6.375	0.0518		0.0468	0.0491	0.0493	0.0501		
6.625	0.0593		0.0548	0.0532	0.0527	0.0544	0.0581	
6.875	0.0609		0.0626	0.0593	0.0600	0.0616	0.0696, 0.0417	
7.125	0.0708		0.0681	0.0683	0.0655	0.0703	0.0783	
7.375	0.0952		0.0786	0.0762	0.0733	0.0782	0.0891	0.1074

WHITE OAK LABORATORY
TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

WTR1421
RUN 32

ALPH 14.94 deg PHI 112.59 deg
AVERAGED DATA

PO 14.65 psia
SCALE FACTOR: 1.0000

TO 77.03 degF
MACH 4.0

BODY PRESSURES (PSI)

z/d	theta:	127.6	142.6	157.6	172.6	187.6
0.5	0.1291					
1.0	0.1031					
1.5	0.0903	0.0767	0.0761	0.0992	0.1400	0.1827, 0.0741
2.0	0.0608					0.1405, 0.0692
2.5	0.0510	0.0534	0.0514	0.0603	0.0842	0.1125
3.0	0.0582					
3.5	0.0413	0.0472	0.0513	0.0483	0.0529	0.0758
4.0	0.0376	0.0462	0.0503	0.0435	0.0477	0.0609
4.3	0.0436	0.0467	0.0430	0.0527	0.0402	0.0623
4.5	0.0420	0.0486	0.0521	0.0496	0.0473	0.0520
4.8	0.0457	0.0479	0.0350	0.0468	0.0432	0.0607
5.0	0.0460	0.0338	0.0340	0.0321	0.0584	0.0386
5.5	0.0455	0.0416	0.0548	0.0429	0.0487	0.0335
6.0	0.0436	0.0502	0.0456	0.0473	0.0535	0.0271
6.5	0.0414	0.0531	0.0523	0.0537	0.0481	0.0280
7.0	0.0414	0.0450	0.0672	0.0746	0.0746	0.0297
7.5	0.0521	0.0489	0.0377	0.0692	0.0424	0.0441
8.0			0.0640		0.0470	0.0433

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0433+							
4.125								
4.375	0.04341	0.0454						
4.625		0.0392						
4.875		0.0386						
5.125	0.0389							
5.375	0.0327							
5.625	0.0275, 0.0308							
5.875	0.0360				0.0294			
6.125		0.0311			0.0310			
6.375	0.0394	0.0361			0.0391			
6.625	0.0412	0.0423			0.0388			
6.875	0.0392	0.0421			0.0411		0.0409	
7.125	0.0441	0.0439			0.0421		0.0425, 0.0365	
7.375	0.0479	0.0439			0.0422		0.0422	
					0.0420		0.0465	0.0482

WHITE OAK LABORATORY

WIR1421 RUN 33		TUNNEL T2 PRESSURE TEST										WTR1421 RUN 33							
ALPH		-0.03 deg		PIII		135.26 deg AVERAGED DATA		PO		14.65 psia SCALE FACTOR:		TO		77.44 degF		MACH		4.0	

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1017+							
4.125								
4.375	0.10291	0.1054						
4.625			0.0995					
4.875			0.1056					
5.125		0.1037		0.1018				
5.375	0.0956		0.0927	0.0900				
5.625	0.0960, 0.0942		0.0921	0.0944				
5.875	0.0993		0.0988	0.0927	0.0922			
6.125			0.0958	0.0967	0.0903	0.0940		
6.375	0.0931		0.0922	0.0938	0.0921	0.0881		
6.625	0.0968		0.0928	0.0930	0.0904	0.0911	0.0908	
6.875	0.0949		0.0972	0.0945	0.0950	0.0939	0.0965, 0.0859	
7.125	0.0989		0.0963	0.0989	0.0982	0.1057	0.1184	
7.375	0.1098		0.0954	0.0962	0.1024	0.1272	0.1663	0.2148

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSIN1(PR/10) PSIN2(TC/1)									
ALPH	4.95 deg	PHI	135.34 deg AVERAGED DATA	P0	14.64 psia SCALE FACTOR:	T0	77.75 degF	MACH	4.0
BODY PRESSURES (PSI)									
z/d	theta:	135.3	150.3	165.3	180.3	195.3	210.3		
0.5		0.2406							
1.0		0.1816							
1.5		0.1462							
2.0		0.0992	0.1457	0.1553	0.1712	0.1932	0.2046, 0.1273		
2.5		0.0826	0.0895	0.0982	0.1083	0.1196	0.1570, 0.1111		
3.0		0.0828					0.1270		
3.5		0.0687	0.0735	0.0800	0.0868	0.0860	0.0896		
4.0		0.0697	0.0750	0.0770	0.0769	0.0810	0.0784		
4.3		0.0761	0.0764	0.0699	0.0846	0.0725	0.0821		
4.5		0.0758	0.0793	0.0803	0.0823	0.0779	0.0772		
4.8		0.0785	0.0778	0.0639	0.0797	0.0731	0.0926		
5.0		0.0786	0.0644	0.0624	0.0647	0.0872	0.0797		
5.5		0.0768	0.0706	0.0828	0.0724	0.0748	0.0800		
6.0		0.0711	0.0770	0.0717	0.0752	0.0803	0.0799		
6.5		0.0653	0.0775	0.0761	0.0796	0.0745	0.0813		
7.0		0.0680	0.0704	0.0924	0.0994	0.0986	0.0816		
7.5		0.0848	0.0821	0.0745	0.1110	0.0907	0.1005		
8.0				0.1923		0.2198	0.1715		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0800+							
4.125								
4.375	0.07661	0.0799						
4.625		0.0738						
4.875		0.0777						
5.125	0.0866							
5.375	0.0825							
5.625	0.0733, 0.0826	0.0650						
5.875	0.0892	0.0634			0.0631			
6.125		0.0686						
6.375	0.0824	0.0656			0.0606	0.0652		
6.625	0.0865	0.0624			0.0646	0.0623		
6.875	0.0840	0.0646			0.0651	0.0676	0.0685	
7.125	0.0882	0.0705			0.0721	0.0733	0.0780, 0.0508	
7.375	0.1043	0.0744			0.0792	0.0887	0.0974	
		0.0860			0.0966	0.1161	0.1336	0.1590

WIR1421
RUN 35

ALPH 9.96 deg PHI 134.94 deg
AVERAGED DATA

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

TUNNEL T2 PRESSURE TEST

WIITE OAK LABORATORY

WTR1421
RUN 35

SCALE FACTOR: 1.0000

PO 14.64 psia

TO 77.99 degF

MACH 4.0

z/d theta: 134.9

0.5	0.1855
1.0	0.1392
1.5	0.1125
2.0	0.0750
2.5	0.0629
3.0	0.0692
3.5	0.0557
4.0	0.0547
4.3	0.0601
4.5	0.0576
4.8	0.0590
5.0	0.0587
5.5	0.0566
6.0	0.0522
6.5	0.0492
7.0	0.0513
7.5	0.0637
8.0	

149.9 164.9 179.9 194.9 209.9

0.1156 0.1335 0.1635 0.2034 0.2373, 0.0958
0.1812, 0.0887
0.1471

0.0673 0.0808 0.1000 0.1240

0.0582 0.0613 0.0750 0.0857 0.1007
0.0592 0.0638 0.0786 0.0843
0.0599 0.0498 0.0707 0.0683 0.0867
0.0603 0.0587 0.0659 0.0726 0.0821
0.0585 0.0428 0.0619 0.0671 0.0964
0.0451 0.0409 0.0476 0.0810 0.0838
0.0514 0.0617 0.0564 0.0723 0.0841
0.0583 0.0523 0.0597 0.0781 0.0811
0.0609 0.0587 0.0654 0.0729 0.0817
0.0535 0.0740 0.0834 0.0957 0.0796
0.0604 0.0528 0.0903 0.0847 0.0987
0.1682 0.2367 0.1771

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0690+							
4.125								
4.375	0.06641	0.0711						
4.625		0.0651						
4.875		0.0680						
5.125	0.0680							
5.375	0.0624							
5.625	0.0536, 0.0615							
5.875	0.0693				0.0544			
6.125					0.0525	0.0560		
6.375	0.0645				0.0551	0.0534		
6.625	0.0692				0.0562	0.0575		
6.875	0.0674				0.0610	0.0632	0.0585	
7.125	0.0734				0.0649	0.0747	0.0659, 0.0415	
7.375	0.0874				0.0775	0.0943	0.0786	
							0.1035	0.1098

WTR1421
RUN 36

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)

ALPH 14.95 deg PHI 135.31 deg PO 14.72 psia TO 78.35 degF MACH 4.0
AVERAGED DATA SCALE FACTOR: 1.0000

WTR1421
RUN 36

theta: 135.3

z/d	150.3	165.3	180.3	195.3	210.3
0.5					
0.1382					
1.0					
0.1017					
1.5					
0.0829					
2.0	0.0883	0.1153	0.1591	0.2174	0.2746, 0.0740
2.5					0.2126, 0.0724
0.0566					0.1744
3.0	0.0503	0.0692	0.0968	0.1337	
0.0593					
3.5	0.0494	0.0527	0.0712	0.0922	0.1182
0.0466					0.1020
4.0	0.0525	0.0501	0.0606	0.0834	0.1041
0.0476					0.1005
4.3	0.0541	0.0448	0.0673	0.0741	0.1136
0.0539					0.1000
4.5	0.0522	0.0545	0.0634	0.0804	0.0923
0.0554					0.0846
4.8	0.0559	0.0418	0.0617	0.0775	0.0801
0.0554					0.0750
5.0	0.0453	0.0418	0.0511	0.0917	0.0857
0.0567					0.1131
5.5	0.0586	0.0646	0.0632	0.0858	
0.0577					
6.0	0.0642	0.0601	0.0707	0.0932	
0.0578					
6.5	0.0694	0.0806	0.0905	0.1135	
0.0623					
7.0	0.0658	0.0876	0.1020	0.1337	
0.0769					
7.5	0.0745	0.0657	0.1021	0.0928	
8.0		0.0947		0.1043	

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0683+							
4.125								
4.375	0.06421	0.0699						
4.625								
4.875								
5.125	0.0644							
5.375	0.0580							
5.625	0.0527, 0.0586							
5.875	0.0654							
6.125								
6.375	0.0606							
6.625	0.0649							
6.875	0.0623							
7.125	0.0652							
7.375	0.0691							

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	-0.04 deg	PHI	157.42 deg AVERAGED DATA	P0	14.74 psia SCALE FACTOR:	T0	78.80 degF	MACII	WTR1421 RUN 37
						1.0000			4.0
BODY PRESSURES (PSI)									
z/d	theta:	157.4	172.4	187.4	202.4	217.4	232.4		
0.5	0.3042								
1.0	0.2299								
1.5	0.1818		0.1762	0.1763	0.1777	0.1823	0.1781, 0.1705		
2.0	0.1277						0.1364, 0.1383		
2.5	0.1059		0.1092	0.1119	0.1133	0.1148	0.1124		
3.0	0.0961								
3.5	0.0832		0.0882	0.0933	0.0952	0.0911	0.0896		
4.0	0.0859		0.0910	0.0927	0.0903	0.0890	0.0831		
4.3	0.0920		0.0929	0.0874	0.0982	0.0934	0.0887		
4.5	0.0932		0.0973	0.0992	0.0982	0.0891	0.0861		
4.8	0.0964		0.0968	0.0859	0.0970	0.0876	0.1016		
5.0	0.0973		0.0856	0.0844	0.0852	0.1006	0.0914		
5.5	0.0947		0.0903	0.1016	0.0914	0.0906	0.0924		
6.0	0.0907		0.0967	0.0931	0.0953	0.0962	0.0922		
6.5	0.0867		0.0971	0.0972	0.0994	0.0916	0.0941		
7.0	0.0861		0.0885	0.1094	0.1163	0.1137	0.0938		
7.5	0.0995		0.0963	0.0857	0.1141	0.0958	0.1057		
8.0				0.1377		0.1009	0.0836		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625									
3.875	0.1009+								
4.125									
4.375	0.10271	0.1051							
4.625			0.0990						
4.875			0.1049						
5.125				0.1009					
5.375	0.1031			0.0905					
5.625	0.0955			0.0940					
5.875	0.0959, 0.0942			0.0924					
6.125	0.0993			0.0934					
6.375				0.0966					
6.625	0.0930			0.0929					
6.875	0.0960			0.0925					
7.125	0.0946			0.0926					
7.375	0.0971			0.0937					
	0.0990			0.0892					
					0.0909	0.0931			
					0.0912	0.0874			
					0.0898	0.0897			
					0.0922	0.0898			
					0.0914	0.0886			
					0.0905	0.0887			
					0.0874				
						0.0890			
						0.0894, 0.0866			
						0.0886			
						0.0863			
							0.0864		

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	4.94 deg	PHI	157.81 deg	P0	14.75 psia	T0	79.03 degf	MACH	4.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	157.8	172.8	187.8	202.8	217.8	232.8		
0.5		0.2660							
1.0		0.1994							
1.5		0.1586							
2.0		0.1089	0.1651	0.1795	0.1969	0.2198	0.2287, 0.1261		
2.5		0.0894	0.0997	0.1115	0.1235	0.1354	0.1750, 0.1088		
3.0		0.0835					0.1431		
3.5		0.0699	0.0774	0.0879	0.0979	0.0997	0.1039		
4.0		0.0705	0.0778	0.0847	0.0893	0.0953	0.0948		
4.3		0.0762	0.0787	0.0778	0.0960	0.0876	0.0983		
4.5		0.0777	0.0828	0.0895	0.0959	0.0921	0.0942		
4.8		0.0801	0.0812	0.0747	0.0931	0.0914	0.1104		
5.0		0.0802	0.0692	0.0723	0.0801	0.1032	0.0987		
5.5		0.0768	0.0723	0.0880	0.0836	0.0894	0.0958		
6.0		0.0720	0.0776	0.0767	0.0852	0.0935	0.0947		
6.5		0.0679	0.0775	0.0799	0.0881	0.0866	0.0952		
7.0		0.0708	0.0715	0.0920	0.1031	0.1078	0.0925		
7.5		0.0907	0.0901	0.0772	0.1034	0.0874	0.1000		
8.0				0.2006		0.1139	0.0947		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625									
3.875	0.1037+								
4.125									
4.375	0.10201	0.1030							
4.625			0.0965						
4.875			0.1003						
5.125	0.1024			0.0947					
5.375	0.0974			0.0839					
5.625	0.0839, 0.0978			0.0874	0.0840				
5.875	0.1044			0.0856					
6.125				0.0886					
6.375	0.0975			0.0819	0.0846				
6.625	0.0995			0.0829	0.0788				
6.875	0.0967			0.0807	0.0810	0.0796			
7.125	0.0987			0.0825	0.0806	0.0794, 0.0635			
7.375	0.0990			0.0833	0.0813	0.0783			
				0.0793	0.0769	0.0758	0.0760		

WHITE OAK LABORATORY

WTR1421
RUN 40

WTR1421
RUN 40

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSIN1(PR/10) PSIN2(TC/1)

ALPH	15.00 deg	PHI	157.86 deg	P0	14.74 psia	T0	79.60 degF	MACH	4.0
				AVERAGED DATA		SCALE FACTOR:		1.0000	

BODY PRESSURES (PSI)

z/d	theta:	157.9	172.9	187.9	202.9	217.9	232.9
0.5		0.1866					
1.0		0.1363					
1.5		0.1067					
2.0		0.0700	0.1362	0.1831	0.2435	0.3124	0.3691,0.0792
2.5		0.0548	0.0780	0.1114	0.1520	0.1968	0.2884,0.0749
3.0		0.0530					0.2397
3.5		0.0426	0.0554	0.0824	0.1141	0.1442	0.1728
4.0		0.0484	0.0538	0.0760	0.1029	0.1345	0.1551
4.3		0.0558	0.0543	0.0693	0.1079	0.1577	0.1557
4.5		0.0575	0.0565	0.0769	0.1054	0.1282	0.1527
4.8		0.0620	0.0577	0.0634	0.1023	0.1274	0.1679
5.0		0.0653	0.0498	0.0610	0.0911	0.1383	0.1586
5.5		0.0679	0.0615	0.0778	0.0956	0.1535	0.1535
6.0		0.0693	0.0740	0.0720	0.0984	0.1326	0.1504
6.5		0.0750	0.0851	0.0851	0.1043	0.1280	0.1505
7.0		0.0894	0.0934	0.1107	0.1230	0.1492	0.1494
7.5		0.1111	0.1090	0.1000	0.1267	0.1327	0.1564
8.0				0.1323		0.1332	0.1568

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1235+							
4.125								
4.375	0.11631	0.1246						
4.625			0.1185					
4.875			0.1197					
5.125	0.1486			0.1156				
5.375	0.1428		0.1011	0.1046				
5.625	0.0706, 0.1426		0.0995	0.1048				
5.875	0.1477		0.1022	0.1020	0.1044			
6.125			0.0991	0.1050	0.1022	0.1035		
6.375	0.1381		0.0927	0.0988	0.0978	0.0967		
6.625	0.1405		0.0926	0.0985	0.0959	0.0962	0.0955	
6.875	0.1411		0.0972	0.0979	0.0970	0.0950	0.0948, 0.0589	
7.125	0.1432		0.0941	0.0980	0.0986	0.0957	0.0958	
7.375	0.1414		0.0929	0.0966	0.0970	0.0934	0.0943	0.0946

WIR1421
RUN 41

ALPHI -0.04 deg PHII 180.92 deg
AVERAGED DATA

PSI CONFIGURATION PSI#1(PR/IO) PSI#2(IC/I)

TUNNEL T2 PRESSURE TEST

WHITE OAK LABORATORY

WIR1421
RUN 41

MACII 4.0

z/d' theta: 180.9
0.5 0.3052
1.0 0.2306
1.5 0.1816
2.0 0.1284
2.5 0.1076
3.0 0.0958
3.5 0.0837
4.0 0.0862
4.3 0.0916
4.5 0.0940
4.8 0.0971
5.0 0.0978
5.5 0.0946
6.0 0.0912
6.5 0.0874
7.0 0.0873
7.5 0.1001
8.0

PO 14.74 psia
SCALE FACTOR: 1.0000

TO 79.76 degF

MACII 4.0

210.9 225.9 240.9 255.9

0.1773 0.1786 0.1833 0.1790, 0.1703
0.1364, 0.1364
0.1130

0.1099 0.1123 0.1133 0.1145

0.0881 0.0931 0.0949 0.0911 0.0895
0.0908 0.0924 0.0905 0.0891 0.0840
0.0926 0.0876 0.0972 0.0844 0.0889
0.0970 0.0993 0.0983 0.0891 0.0865
0.0968 0.0874 0.0973 0.0888 0.1014
0.0869 0.0858 0.0870 0.1002 0.0926
0.0907 0.1013 0.0917 0.0911 0.0928
0.0970 0.0931 0.0952 0.0961 0.0926
0.0890 0.0970 0.0993 0.0920 0.0942
0.0966 0.1083 0.1143 0.1117 0.0940
0.0865 0.1126 0.0956 0.1049
0.1216 0.0976 0.0812

WING PRESSURES (PSI)

z/d r/d: 0.5935 0.7185 0.8435 0.9685 1.0935 1.2185 1.3435

3.625 0.0995 0.1012 0.0909 0.0932 0.0937 0.0930 0.0912 0.0925
3.875 0.1005+ 0.1045 0.0929 0.0977 0.0954 0.0968 0.0833 0.0794
4.125 0.0932 0.0937 0.0930 0.0912 0.0845 0.0833 0.0814
4.375 0.10231 0.1049 0.0929 0.0977 0.0954 0.0968 0.0845 0.0819
4.625 0.0932 0.0937 0.0930 0.0912 0.0845 0.0833 0.0814
4.875 0.0932 0.0937 0.0930 0.0912 0.0845 0.0833 0.0819
5.125 0.1031 0.0932 0.0937 0.0930 0.0912 0.0845 0.0833 0.0819
5.375 0.0951 0.0932 0.0937 0.0930 0.0912 0.0845 0.0833 0.0819
5.625 0.0961, 0.0942 0.0932 0.0937 0.0930 0.0912 0.0845 0.0833 0.0819
5.875 0.0982 0.0932 0.0937 0.0930 0.0912 0.0845 0.0833 0.0819
6.125 0.0851 0.0932 0.0937 0.0930 0.0912 0.0845 0.0833 0.0819
6.375 0.0870 0.0932 0.0937 0.0930 0.0912 0.0845 0.0833 0.0819
6.625 0.0939 0.0932 0.0937 0.0930 0.0912 0.0845 0.0833 0.0819
6.875 0.0970 0.0932 0.0937 0.0930 0.0912 0.0845 0.0833 0.0819
7.125 0.0970 0.0932 0.0937 0.0930 0.0912 0.0845 0.0833 0.0819
7.375 0.0993 0.0932 0.0937 0.0930 0.0912 0.0845 0.0833 0.0819

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSIN1(PR/10) PSIN2(TC/1)

BODY PRESSURES (PSI)

WING PRESSURES (PSI)

A-176

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)									
WTR1421 RUN 43	ALPH	9.99 deg	PHI	180.56 deg AVERAGED DATA	P0	14.73 psia SCALE FACTOR:	T0 1.0000	80.54 degF	MACII 4.0
BODY PRESSURES (PSI)									
	z/d	theta:	180.6	195.6	210.6	225.6	240.6	255.6	
	0.5	0.2881							
	1.0	0.2156							
	1.5	0.1691							
	2.0	0.1168		0.1994	0.2370	0.2757	0.3143	0.3310, 0.0987	
	2.5	0.0940		0.1182	0.1462	0.1733	0.1966	0.2556, 0.0885	
	3.0	0.0804						0.2115	
	3.5	0.0648		0.0863	0.1104	0.1326	0.1476	0.1610	
	4.0	0.0627		0.0843	0.1060	0.1250	0.1431	0.1520	
	4.3	0.0661		0.0838	0.0997	0.1302	0.1349	0.1542	
	4.5	0.0642		0.0850	0.1079	0.1293	0.1393	0.1510	
	4.8	0.0648		0.0825	0.0952	0.1267	0.1390	0.1654	
	5.0	0.0643		0.0709	0.0918	0.1155	0.1480	0.1556	
	5.5	0.0609		0.0727	0.1048	0.1165	0.1347	0.1504	
	6.0	0.0579		0.0755	0.0926	0.1167	0.1372	0.1468	
	6.5	0.0595		0.0725	0.0937	0.1177	0.1296	0.1464	
	7.0	0.0643		0.0648	0.1007	0.1288	0.1463	0.1439	
	7.5	0.0754		0.0692	0.0754	0.1226	0.1271	0.1510	
	8.0				0.1049		0.1199	0.1154	
WING PRESSURES (PSI)									
	z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
	3.625	0.1712+							
	3.875								
	4.125								
	4.375	0.1689	0.1688						
	4.625								
	4.875								
	5.125		0.1637		0.1591				
	5.375		0.1538		0.1476				
	5.625	0.0804	0.1509		0.1492				
	5.875		0.1531		0.1477	0.1459			
	6.125				0.1499	0.1445	0.1441		
	6.375		0.1378		0.1362	0.1345	0.1302		
	6.625		0.1372		0.1359	0.1329	0.1313		
	6.875		0.1433		0.1352	0.1329	0.1314	0.1309	
	7.125		0.1446		0.1414	0.1383	0.1384	0.1292, 0.0901	
	7.375		0.1412		0.1334	0.1328	0.1339	0.1356	
								0.1323	0.1318

WTR1421 RUN 46		WILTE OAK LABORATORY		TUNNEL 12 PRESSURE TEST		PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)		WTR1421 RUN 46	
ALPH	-0.06 deg	PHI	203.30 deg	P0	14.72 psia	T0	81.30 degF	MACI	4.0
		AVERAGED DATA		SCALE FACTOR:		1.0000			
		theta:		BODY PRESSURES (PSI)					
z/d		203.3	218.3	233.3	248.3	263.3	278.3		
0.5		0.3068							
1.0		0.2315							
1.5		0.1817							
2.0		0.1294	0.1782	0.1784	0.1801	0.1841	0.1804, 0.1703		
2.5		0.1087	0.1106	0.1125	0.1137	0.1149	0.1370, 0.1350		
3.0		0.0947					0.1139		
3.5		0.0841	0.0883	0.0927	0.0942	0.0912	0.0898		
4.0		0.0863	0.0909	0.0925	0.0906	0.0893	0.0849		
4.3		0.0915	0.0925	0.0878	0.0969	0.0849	0.0893		
4.5		0.0945	0.0969	0.0993	0.0995	0.0893	0.0875		
4.8		0.0974	0.0973	0.0891	0.0978	0.0904	0.1016		
5.0		0.0984	0.0885	0.0872	0.0892	0.1004	0.0940		
5.5		0.0948	0.0912	0.1010	0.0919	0.0915	0.0939		
6.0		0.0915	0.0966	0.0934	0.0955	0.0963	0.0930		
6.5		0.0883	0.0969	0.0972	0.0990	0.0922	0.0945		
7.0		0.0881	0.0903	0.1070	0.1123	0.1081	0.0941		
7.5		0.1006	0.0970	0.0876	0.1111	0.0955	0.1037		
8.0				0.1173		0.0959	0.0807		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1016+							
4.125								
4.375	0.09241	0.1055						
4.625			0.1007					
4.875			0.1045					
5.125				0.1019				
5.375	0.1037		0.0935					
5.625	0.0950		0.0934					
5.875	0.0964, 0.0947		0.0978	0.0932	0.0920			
6.125	0.0971		0.0952	0.0969	0.0926	0.0926		
6.375	0.0856		0.0843	0.0846	0.0836	0.0806		
6.625	0.0858		0.0849	0.0844	0.0834	0.0822	0.0813	
6.875	0.0934		0.0950	0.0856	0.0842	0.0826	0.0813, 0.0892	
7.125	0.0965		0.0919	0.0928	0.0906	0.0906	0.0881	
7.375	0.0998		0.0904	0.0891	0.0878	0.0878	0.0861	0.0855

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
ALPH	4.96 deg	PHI	203.25 deg	P0	14.71 psia	TO	81.60 degF	MACH	4.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	203.2	218.2	233.2	248.2	263.2	278.2		
0.5		0.3402							
1.0		0.2578							
1.5		0.2021	0.2153	0.2297	0.2419	0.2539	0.2491, 0.1309		
2.0		0.1429					0.1903, 0.1087		
2.5		0.1177	0.1307	0.1423	0.1514	0.1564	0.1557		
3.0		0.1012							
3.5		0.0869	0.0986	0.1107	0.1191	0.1208	0.1250		
4.0		0.0869	0.0999	0.1094	0.1150	0.1198	0.1196		
4.3		0.0913	0.1005	0.1045	0.1209	0.1143	0.1231		
4.5		0.0933	0.1045	0.1157	0.1229	0.1182	0.1208		
4.8		0.0955	0.1037	0.1046	0.1211	0.1192	0.1365		
5.0		0.0958	0.0936	0.1014	0.1107	0.1290	0.1298		
5.5		0.0917	0.0943	0.1139	0.1114	0.1177	0.1289		
6.0		0.0877	0.0985	0.1030	0.1137	0.1226	0.1256		
6.5		0.0857	0.0965	0.1052	0.1166	0.1172	0.1241		
7.0		0.0897	0.0916	0.1138	0.1287	0.1337	0.1204		
7.5		0.1087	0.1033	0.0950	0.1239	0.1140	0.1245		
8.0				0.1331		0.1065	0.0867		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1441+							
4.125								
4.375	0.13591	0.1479						
4.625			0.1436					
4.875			0.1437					
5.125		0.1393						
5.375	0.1307							
5.625	0.1008, 0.1283				0.1380			
5.875	0.1305							
6.125			0.1275		0.1324	0.1399		
6.375	0.1152		0.1152		0.1207	0.1249		
6.625	0.1144		0.1167		0.1188	0.1234		
6.875	0.1207		0.1164		0.1174	0.1211	0.1301	
7.125	0.1229		0.1204		0.1231	0.1269	0.1277, 0.1084	
7.375	0.1188		0.1180		0.1188	0.1231	0.1305	
							0.1263	0.1341

WHITE OAK LABORATORY

WIR1421
RUN 48

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH 9.96 deg PHI 203.32 deg 203.32 deg 14.71 psia 81.97 degF 4.0
AVERAGED DATA SCALE FACTOR: 1.0000 MACH

theta: 203.3

z/d	218.3	233.3	248.3	263.3	278.3
0.5	0.3702				
1.0	0.2822				
1.5	0.2217				
2.0	0.1590	0.2943	0.3234	0.3453	0.3398, 0.0989
2.5	0.1305	0.1574	0.2052	0.2175	0.2623, 0.0851
3.0	0.1083				0.2171
3.5	0.0925	0.1163	0.1401	0.1684	0.1788
4.0	0.0903	0.1153	0.1377	0.1678	0.1730
4.3	0.0940	0.1158	0.1328	0.1617	0.1766
4.5	0.0937	0.1187	0.1429	0.1650	0.1743
4.8	0.0944	0.1172	0.1318	0.1669	0.1941
5.0	0.0940	0.1063	0.1280	0.1761	0.1911
5.5	0.0873	0.1052	0.1374	0.1657	0.1804
6.0	0.0800	0.1072	0.1264	0.1716	0.1749
6.5	0.0743	0.1038	0.1286	0.1606	0.1716
7.0	0.0731	0.0956	0.1343	0.1728	0.1687
7.5	0.0883	0.0966	0.1107	0.1567	0.1783
8.0			0.1303	0.1440	0.1202

BODY PRESSURES (PSI)

WING PRESSURES (PSI)

z/d	r/d: 0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625							
3.875	0.2063+						
4.125							
4.375	0.20071	0.2110					
4.625							
4.875							
5.125	0.1947						
5.375	0.1838						
5.625	0.0811, 0.1806			0.2027			
5.875	0.1817						
6.125							
6.375	0.1673			0.1918	0.2051		
6.625	0.1659			0.1778	0.1891		
6.875	0.1731			0.1746	0.1843		
7.125	0.1761			0.1712	0.1793	0.1976	
7.375	0.1768			0.1756	0.1820	0.1933, 0.1194	
				0.1715	0.1765	0.1922	
						0.1842	0.1998

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/IO) PSI#2(IC/I)									
ALPH	14.95 deg	PHI	203.36 deg	PO	14.71 psi	TO	82.18 degF	MACH	4.0
			AVERAGED DATA		SCALE FACTOR:	1.0000			
BODY PRESSURES (PSI)									
z/d	theta:	203.4	218.4	233.4	248.4	263.4	278.4		
0.5		0.4033							
1.0		0.3100							
1.5		0.2461							
2.0		0.1796	0.3088	0.3715	0.4234	0.4586	0.4529, 0.0746		
2.5		0.1473	0.1921	0.2368	0.2758	0.2974	0.3558, 0.0731		
3.0		0.1214					0.2996		
3.5		0.1057							
4.0		0.1025	0.1434	0.1827	0.2143	0.2345	0.2520		
4.3		0.1059	0.1408	0.1792	0.2117	0.2365	0.2504		
4.5		0.1064	0.1411	0.1753	0.2173	0.2301	0.2511		
4.8		0.1065	0.1457	0.1861	0.2208	0.2333	0.2563		
5.0		0.1065	0.1441	0.1758	0.2179	0.2401	0.2835		
5.5		0.0985	0.1332	0.1713	0.2093	0.2498	0.2732		
6.0		0.0912	0.1310	0.1780	0.2069	0.2412	0.2561		
6.5		0.0889	0.1300	0.1689	0.2061	0.2365	0.2492		
7.0		0.0858	0.1195	0.1681	0.2051	0.2265	0.2479		
7.5		0.1021	0.1211	0.1691	0.2135	0.2423	0.2503		
8.0				0.1507	0.2100	0.2279	0.2575		
				0.1695		0.2070	0.1722		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625									
3.875	0.2929+								
4.125									
4.375	0.29101	0.2995							
4.625			0.2954						
4.875			0.2881						
5.125				0.3008					
5.375	0.2751			0.2799					
5.625	0.0773, 0.2596			0.2738					
5.875				0.2681	0.2947				
6.125	0.2604			0.2654					
6.375		0.2478		0.2508	0.2776	0.2976			
6.625	0.2465			0.2495	0.2601	0.2802			
6.875	0.2556			0.2492	0.2567	0.2721	0.2927		
7.125	0.2570			0.2531	0.2511	0.2649	0.2862, 0.1251		
7.375	0.2664			0.2526	0.2555	0.2633	0.2805		
				0.2492	0.2513	0.2563	0.2685	0.2904	

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
WTR1421 RUN 50	ALPH	-0.06 deg	PHI	225.98 deg AVERAGED DATA	P0	14.71 psia SCALE FACTOR:	T0	82.47 degF	MACH
							1.0000		4.0
BODY PRESSURES (PSI)									
z/d	theta:	226.0	241.0	256.0	271.0	286.0	301.0		
0.5	0.3083								
1.0	0.2327								
1.5	0.1820								
2.0	0.1305		0.1798	0.1800	0.1819	0.1852	0.1810, 0.1707		
2.5	0.1095		0.1109	0.1126	0.1142	0.1149	0.1373, 0.1343		
3.0	0.0941						0.1142		
3.5	0.0847		0.0883	0.0921	0.0938	0.0908	0.0902		
4.0	0.0874		0.0913	0.0924	0.0911	0.0900	0.0864		
4.3	0.0917		0.0925	0.0887	0.0964	0.0862	0.0901		
4.5	0.0944		0.0961	0.0990	0.0981	0.0904	0.0885		
4.8	0.0971		0.0968	0.0901	0.0977	0.0912	0.1011		
5.0	0.0982		0.0896	0.0884	0.0907	0.0993	0.0949		
5.5	0.0948		0.0916	0.1007	0.0926	0.0921	0.0938		
6.0	0.0920		0.0969	0.0938	0.0958	0.0966	0.0942		
6.5	0.0898		0.0969	0.0973	0.0989	0.0927	0.0951		
7.0	0.0904		0.0921	0.1060	0.1110	0.1081	0.0952		
7.5	0.1024		0.0985	0.0907	0.1107	0.0972	0.1041		
8.0				0.1177		0.0985	0.0874		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1017+							
4.125								
4.375	0.09291	0.1040						
4.625								
4.875		0.1014						
5.125		0.1040						
5.375	0.1038							
5.625	0.0947							
5.875	0.0946							
6.125	0.0972							
6.375	0.0866							
6.625	0.0848							
6.875	0.0934							
7.125	0.0966							
7.375	0.0994							
		0.0945	0.0945	0.0945	0.0923	0.0926	0.0826	
		0.0940	0.0940	0.0945	0.0942	0.0821	0.0828, 0.0928	
		0.0974	0.0974	0.0974	0.0938	0.0832	0.0896	
		0.0951	0.0951	0.0954	0.0845	0.0837	0.0892	
		0.0852	0.0852	0.0857	0.0850	0.0914	0.0917	
		0.0859	0.0859	0.0866	0.0848	0.0901		
		0.0955	0.0955	0.0935	0.0916			
		0.0918	0.0918	0.0903	0.0895			
		0.0911	0.0911					

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)									
WTR1421 RUN 51	ALPH	5.02 deg	PHI	225.89 deg AVERAGED DATA	P0	14.71 psia SCALE FACTOR:	T0	82.77 degF	MACH
							1.0000		4.0
BODY PRESSURES (PSI)									
z/d	theta:	225.9	240.9	255.9	270.9	285.9	300.9		
0.5		0.3795							
1.0		0.2891							
1.5		0.2264							
2.0		0.1629	0.2371	0.2467	0.2510	0.2535	0.2399, 0.1420		
2.5		0.1349	0.1453	0.1526	0.1566	0.1559	0.1826, 0.1137		
3.0		0.1123					0.1498		
3.5		0.0992	0.1092	0.1182	0.1228	0.1233			
4.0		0.0997	0.1109	0.1181	0.1216	0.1244	0.1270		
4.3		0.1035	0.1118	0.1144	0.1276	0.1206	0.1236		
4.5		0.1060	0.1163	0.1256	0.1305	0.1247	0.1274		
4.8		0.1083	0.1165	0.1167	0.1299	0.1269	0.1253		
5.0		0.1089	0.1080	0.1142	0.1220	0.1351	0.1388		
5.5		0.1047	0.1085	0.1246	0.1213	0.1250	0.1336		
6.0		0.1018	0.1119	0.1152	0.1230	0.1281	0.1359		
6.5		0.1004	0.1109	0.1171	0.1249	0.1224	0.1369		
7.0		0.1056	0.1078	0.1252	0.1368	0.1427	0.1351		
7.5		0.1261	0.1216	0.1252	0.1368	0.1427	0.1313		
8.0				0.1131	0.1353	0.1294	0.1371		
				0.1490		0.1184	0.0982		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1519+							
4.125								
4.375	0.14931	0.1594						
4.625								
4.875			0.1565					
5.125			0.1545					
5.375	0.1485							
5.625	0.1387							
5.875	0.1123, 0.1366			0.1533				
6.125	0.1369							
6.375		0.1255				0.1552		
6.625	0.1234					0.1415		
6.875	0.1310					0.1386	0.1478	
7.125	0.1338					0.1357	0.1457, 0.1656	
7.375	0.1337					0.1406	0.1480	
						0.1378	0.1455	0.1694

WIR1421 RUN 52		WHITE OAK LABORATORY						WTR1421 RUN 52	
		TUNNEL T2 PRESSURE TEST							
		PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)							
ALPH	9.96 deg	PHI	225.99 deg AVERAGED DATA	P0	14.71 psia SCALE FACTOR:	T0	82.85 degF	MACH	4.0
		BODY PRESSURES (PSI)							
z/d	theta:	226.0	241.0	256.0	271.0	286.0	301.0		
0.5	0.4573								
1.0	0.3546								
1.5	0.2802		0.3115	0.3348	0.3441	0.3430	0.3144, 0.1114		
2.0	0.2051						0.2416, 0.0890		
2.5	0.1699		0.1934	0.2111	0.2191	0.2151	0.2001		
3.0	0.1392								
3.5	0.1241		0.1449	0.1611	0.1687	0.1694	0.1776		
4.0	0.1224		0.1444	0.1598	0.1694	0.1766	0.1791		
4.3	0.1256		0.1448	0.1571	0.1764	0.1738	0.1815		
4.5	0.1275		0.1505	0.1696	0.1817	0.1780	0.1790		
4.8	0.1289		0.1506	0.1621	0.1814	0.1822	0.1940		
5.0	0.1295		0.1422	0.1594	0.1731	0.1881	0.1966		
5.5	0.1222		0.1398	0.1655	0.1693	0.1825	0.2029		
6.0	0.1159		0.1406	0.1548	0.1733	0.1920	0.1977		
6.5	0.1099		0.1363	0.1547	0.1752	0.1825	0.1944		
7.0	0.1068		0.1300	0.1690	0.1916	0.1954	0.1925		
7.5	0.1204		0.1387	0.1475	0.1845	0.1820	0.1986		
8.0				0.1663	0.1691	0.1820	0.1324		

WORKING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.2238†							
4.125								
4.375	0.2251†	0.2334						
4.625			0.2311					
4.875			0.2253					
5.125		0.2140		0.2370				
5.375		0.2027	0.2083	0.2198				
5.625	0.1033, 0.1997	0.2037	0.2037	0.2152	0.2317			
5.875	0.1997	0.2046	0.2108	0.2108				
6.125		0.2013	0.2013	0.2096	0.2202	0.2350		
6.375		0.1891	0.1904	0.1952	0.2038	0.2197		
6.625		0.1867	0.1898	0.1944	0.2019	0.2139	0.2297	
6.875		0.1945	0.1988	0.1946	0.1977	0.2085	0.2250, 0.2057	
7.125		0.1966	0.1953	0.1985	0.2027	0.2100	0.2226	
7.375		0.1989	0.1919	0.1953	0.1988	0.2050	0.2157	0.2399

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/10) PSI#2(IC/1)									
ALPH	14.96 deg	PHI	226.10 deg	P0	14.70 psia	TO	83.21 degF	MACH	4.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	226.1	241.1	256.1	271.1	286.1	301.1		
0.5	0.5409								
1.0	0.4279								
1.5	0.3432								
2.0	0.2573		0.4004	0.4417	0.4579	0.4510	0.4036, 0.0835		
2.5	0.2146		0.2565	0.2855	0.2999	0.2921	0.3153, 0.0672		
3.0	0.1754						0.2652		
3.5	0.1595		0.1944	0.2212	0.2326	0.2336	0.2454		
4.0	0.1564		0.1922	0.2192	0.2361	0.2494	0.2552		
4.3	0.1589		0.1928	0.2179	0.2455	0.2482	0.2652		
4.5	0.1626		0.2012	0.2331	0.2552	0.2519	0.2678		
4.8	0.1642		0.2022	0.2285	0.2548	0.2615	0.2922		
5.0	0.1655		0.1947	0.2256	0.2476	0.2721	0.2924		
5.5	0.1554		0.1886	0.2256	0.2394	0.2647	0.2852		
6.0	0.1485		0.1879	0.2179	0.2605	0.2757	0.2818		
6.5	0.1422		0.1858	0.2263	0.2529	0.2652	0.2830		
7.0	0.1446		0.1834	0.2332	0.2619	0.2758	0.2816		
7.5	0.1467		0.1852	0.2104	0.2572	0.2617	0.2854		
8.0				0.2248		0.2420	0.1896		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.3189+							
3.875								
4.125								
4.375	0.32791	0.3322						
4.625								
4.875								
5.125	0.3048							
5.375	0.2916							
5.625	0.0924, 0.2886							
5.875	0.2906				0.3371			
6.125								
6.375	0.2813				0.3204			
6.625	0.2775				0.3025			
6.875	0.2849				0.3006			
7.125	0.2848				0.2944			
7.375	0.2957				0.2978			
					0.2926			
						0.3015		
							0.3407	
							0.3340, 0.1771	
							0.3274	
							0.3143	
								0.3386

WTR:421
RUN 54

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TUNNEL    T2 PRESSURE TEST
PSI CONFIGURATION  PSI#1(PR/10)  PSI#2(TC/1)
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WTR1421
RUN 54

ALPH	-0.04 deg	PIII	248.63 deg	P0	14.70 psia	TO	83.55 degf	MACH	4.0
				AVERAGED DATA		SCALE FACTOR:		1.0000	

BODY PRESSURES (PSI)

z/d	theta:	248.6	263.6	278.6	293.6	308.6	323.6
0.5	0.3098						
1.0	0.2332						
1.5	0.1818						
2.0	0.1311						
2.5	0.1112	0.1807	0.1812	0.1812	0.1821	0.1851	0.1814, 0.1718
3.0	0.0938	0.1116	0.1130	0.1130	0.1142	0.1148	0.1371, 0.1333
3.5	0.0854						0.1146
4.0	0.0881	0.0882	0.0920	0.0920	0.0933	0.0914	0.0907
4.3	0.0916	0.0908	0.0920	0.0920	0.0915	0.0906	0.0876
4.5	0.0941	0.0920	0.0890	0.0890	0.0957	0.0874	0.0909
4.8	0.0968	0.0951	0.0978	0.0978	0.0971	0.0908	0.0899
5.0	0.0981	0.0963	0.0910	0.0910	0.0975	0.0918	0.1004
5.5	0.0949	0.0922	0.0902	0.0893	0.0922	0.0985	0.0958
6.0	0.0928	0.0967	0.1002	0.1002	0.0932	0.0929	0.0938
6.5	0.0915	0.0966	0.0943	0.0943	0.0961	0.0968	0.0950
7.0	0.0936	0.0945	0.0976	0.0976	0.0990	0.0939	0.0961
7.5	0.1065	0.1027	0.1059	0.1059	0.1098	0.1077	0.0968
8.0			0.0961	0.0961	0.1126	0.1005	0.1063
			0.1220	0.1220		0.1043	0.1000

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1036†							
4.125								
4.375	0.0956†	0.1057						
4.625			0.1040					
4.875			0.1060					
5.125	0.1049			0.1043				
5.375	0.0951		0.0952	0.0942				
5.625	0.0961, 0.0955		0.0946	0.0948	0.0940			
5.875	0.0963		0.0969	0.0950				
6.125			0.0951	0.0983	0.0961	0.0939		
6.375	0.0882		0.0869	0.0871	0.0967	0.0851		
6.625	0.0858		0.0880	0.0878	0.0885	0.0871	0.0877	
6.875	0.0937		0.0966	0.0900	0.0896	0.0919	0.0994, 0.1905	
7.125	0.0977		0.0951	0.0979	0.0998	0.1053	0.1209	
7.375	0.1111		0.0948	0.0960	0.1005	0.1117	0.1372	0.1424

WTR1421
RUN 55

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH 4.97 deg PHI 248.41 deg PO 14.70 psia TO 83.85 degF MACH 4.0

AVERAGED DATA SCALE FACTOR: 1.0000

WTR1421
RUN 55

z/d theta: 248.4

0.5	0.4076	263.4	278.4	293.4	308.4	323.4
1.0	0.3115					
1.5	0.2437	0.2488	0.2505	0.2459	0.2397	0.2191, 0.1596
2.0	0.1768					0.1665, 0.1253
2.5	0.1472	0.1529	0.1548	0.1528	0.1467	0.1371
3.0	0.1208					
3.5	0.1086	0.1150	0.1199	0.1200	0.1182	0.1214
4.0	0.1095	0.1168	0.1196	0.1206	0.1222	0.1211
4.3	0.1128	0.1175	0.1169	0.1263	0.1198	0.1246
4.5	0.1158	0.1217	0.1280	0.1305	0.1239	0.1232
4.8	0.1179	0.1228	0.1215	0.1309	0.1269	0.1353
5.0	0.1189	0.1164	0.1197	0.1254	0.1342	0.1300
5.5	0.1149	0.1169	0.1296	0.1244	0.1262	0.1295
6.0	0.1135	0.1215	0.1224	0.1271	0.1305	0.1361
6.5	0.1135	0.1210	0.1245	0.1287	0.1258	0.1393
7.0	0.1183	0.1200	0.1328	0.1370	0.1394	0.1377
7.5	0.1351	0.1316	0.1239	0.1392	0.1302	0.1438
8.0			0.1546		0.1303	0.1173

BODY PRESSURES (PSI)

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1518+							
4.125								
4.375	0.15231	0.1610						
4.625			0.1594					
4.875			0.1565					
5.125		0.1501		0.1637				
5.375	0.1410		0.1438	0.1504				
5.625	0.1247, 0.1398		0.1415	0.1477	0.1570			
5.875	0.1388		0.1424	0.1461				
6.125			0.1396	0.1469	0.1520	0.1592		
6.375	0.1295		0.1306	0.1338	0.1389	0.1485		
6.625	0.1266		0.1307	0.1341	0.1400	0.1487	0.1679	
6.875	0.1351		0.1395	0.1369	0.1406	0.1550	0.2023, 0.3965	
7.125	0.1388		0.1389	0.1449	0.1524	0.1740	0.2337	
7.375	0.1411		0.1408	0.1485	0.1583	0.1943	0.2523	0.2931

WTR1421
RUN 56

WHITE OAK LABORATORY

TUNNEL 12 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPHI 9.94 deg PHI 248.72 deg AVERAGED DATA PO 14.70 psia SCALE FACTOR: 1.0000 TO 84.10 degF MACH 4.0

z/d theta: 248.7

0.5	0.5225	263.7	278.7	293.7	308.7	323.7
1.0	0.4107					
1.5	0.3260	0.3416	0.3440	0.3300	0.3077	0.2648, 0.1443
2.0	0.2414					0.2020, 0.1120
2.5	0.2020	0.2152	0.2166	0.2087	0.1910	0.1665
3.0	0.1638					
3.5	0.1493	0.1613	0.1657	0.1599	0.1523	0.1596
4.0	0.1481	0.1608	0.1636	0.1620	0.1658	0.1675
4.3	0.1508	0.1608	0.1611	0.1702	0.1667	0.1732
4.5	0.1533	0.1655	0.1732	0.1778	0.1726	0.1718
4.8	0.1549	0.1665	0.1695	0.1810	0.1791	0.1868
5.0	0.1552	0.1608	0.1692	0.1774	0.1865	0.1835
5.5	0.1493	0.1610	0.1777	0.1759	0.1760	0.1788
6.0	0.1466	0.1642	0.1705	0.1768	0.1789	0.1858
6.5	0.1442	0.1609	0.1709	0.1777	0.1837	0.1930
7.0	0.1441	0.1564	0.1758	0.1905	0.1988	0.1962
7.5	0.1606	0.1615	0.1631	0.1903	0.1882	0.2046
8.0			0.1918		0.1805	0.1494

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.2195+							
4.125								
4.375	0.22821	0.2345						
4.625			0.2338					
4.875			0.2275					
5.125	0.2161			0.2389				
5.375	0.2057			0.2238				
5.625	0.1388, 0.2047			0.2185	0.2330			
5.875	0.2040			0.2156				
6.125				0.2051	0.2257	0.2355		
6.375	0.1936			0.2021	0.2105	0.2247		
6.625	0.1881			0.2020	0.2114	0.2227	0.2411	
6.875	0.1966			0.2035	0.2098	0.2263	0.2742, 0.4978	
7.125	0.2005			0.2012	0.2214	0.2426	0.3101	
7.375	0.2065			0.2022	0.2259	0.2609	0.3421	0.4194

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST					WTR1421				
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)					RUN 57				
ALPH	14.97 deg	PHI	248.98 deg	P0	14.69 psia	TO	84.38 degF	MACH	4.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	249.0	264.0	279.0	294.0	309.0	324.0		
0.5	0.6485								
1.0	0.5235								
1.5	0.4230								
2.0	0.3223		0.4524	0.4562	0.4298	0.3863	0.3153, 0.1315		
2.5	0.2723		0.2944	0.2964	0.2806	0.2471	0.2440, 0.1011		
3.0	0.2222						0.2039		
3.5	0.2053		0.2246	0.2286	0.2158	0.1983	0.2092		
4.0	0.2028		0.2230	0.2259	0.2191	0.2254	0.2271		
4.3	0.2048		0.2224	0.2236	0.2302	0.2308	0.2379		
4.5	0.2095		0.2307	0.2388	0.2464	0.2397	0.2350		
4.8	0.2115		0.2315	0.2396	0.2532	0.2522	0.2564		
5.0	0.2116		0.2276	0.2415	0.2525	0.2614	0.2557		
5.5	0.2032		0.2261	0.2468	0.2476	0.2499	0.2515		
6.0	0.2012		0.2295	0.2417	0.2507	0.2618	0.2598		
6.5	0.1991		0.2266	0.2423	0.2557	0.2672	0.2715		
7.5	0.1949		0.2215	0.2496	0.2724	0.2769	0.2810		
8.0	0.1986		0.2260	0.2490	0.2736	0.2698	0.2886		
				0.2627		0.2522	0.2074		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.3067+							
4.125								
4.375	0.32731	0.3304						
4.625		0.3311						
4.875		0.3218						
5.125	0.3037							
5.375	0.2949							
5.625	0.1497, 0.2959	0.3046						
5.875	0.2953	0.3006			0.3326			
6.125		0.3012						
6.375	0.2869	0.2986			0.3244	0.3364		
6.625	0.2803	0.2902			0.3083	0.3262		
6.875	0.2880	0.2893			0.3091	0.3204	0.3347	
7.125	0.2898	0.2940			0.3023	0.3160	0.3314, 0.2354	
7.375	0.2904	0.2907			0.3053	0.3150	0.3278	
		0.2869			0.2998	0.3074	0.3177	0.3326

WHITE OAK LABORATORY

WIR1421
RUN 58

ALPH -0.07 deg PHI 271.25 deg P0 14.68 psia 10 84.72 degf MACH 4.0

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)

271.25 deg
AVERAGED DATA SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	271.2	301.2	316.2	331.2	346.2
0.5	0.3115					
1.0	0.2343					
1.5	0.1819	0.1814	0.1820	0.1819	0.1855	0.1814, 0.1729
2.0	0.1317					0.1371, 0.1333
2.5	0.1122	0.1126	0.1132	0.1148	0.1147	0.1145
3.0	0.0930					
3.5	0.0858	0.0879	0.0917	0.0929	0.0917	0.0913
4.0	0.0882	0.0906	0.0912	0.0914	0.0903	0.0885
4.3	0.0912	0.0917	0.0890	0.0948	0.0885	0.0911
4.5	0.0954	0.0957	0.0990	0.0981	0.0910	0.0908
4.8	0.0981	0.0974	0.0943	0.0989	0.0945	0.1009
5.0	0.0995	0.0928	0.0923	0.0958	0.0993	0.0983
5.5	0.0950	0.0925	0.0993	0.0936	0.0936	0.0940
6.0	0.0934	0.0965	0.0945	0.0964	0.0968	0.0960
6.5	0.0929	0.0968	0.0973	0.0985	0.0947	0.0968
7.0	0.0953	0.0961	0.1047	0.1074	0.1057	0.0980
7.5	0.1064	0.1034	0.0986	0.1111	0.1022	0.1076
8.0			0.1224		0.1066	0.1033

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1038+							
4.125								
4.375	0.09661	0.1061						
4.625		0.1051						
4.875		0.1050						
5.125	0.1046							
5.375	0.0947							
5.625	0.0957, 0.0962							
5.875	0.0956				0.0957			
6.125		0.0951			0.0989	0.0950		
6.375	0.0909	0.0891	0.0891	0.0894	0.0897			
6.625	0.0864	0.0908	0.0913	0.0938	0.0939	0.1009		
6.875	0.0950	0.0990	0.0963	0.0972	0.1062	0.1390, 0.1958		
7.125	0.1015	0.1005	0.1050	0.1101	0.1329	0.1796		
7.375	0.1063	0.1025	0.1064	0.1210	0.1650	0.2029	0.2189	

WHITE OAK LABORATORY

WTR1421
RUN 59

ALPH 4.97 deg PHI 271.28 deg PO 14.69 psia TO 84.90 degF MACH 4.0

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

AVERAGED DATA SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta	286.3	301.3	316.3	331.3	346.3
0.5	0.4211					
1.0	0.3224					
1.5	0.2522	0.2492	0.2420	0.2299	0.2172	0.1944, 0.1837
2.0	0.1841	0.1534	0.1493	0.1423	0.1329	0.1472, 0.1421
2.5	0.1536					0.1217
3.0	0.1250					
3.5	0.1135	0.1151	0.1149	0.1114	0.1092	0.1122
4.0	0.1144	0.1166	0.1145	0.1134	0.1144	0.1138
4.3	0.1170	0.1169	0.1125	0.1186	0.1134	0.1172
4.5	0.1205	0.1212	0.1233	0.1240	0.1176	0.1167
4.8	0.1230	0.1225	0.1193	0.1261	0.1226	0.1286
5.0	0.1239	0.1182	0.1183	0.1231	0.1282	0.1257
5.5	0.1195	0.1183	0.1266	0.1218	0.1217	0.1217
6.0	0.1192	0.1232	0.1223	0.1251	0.1262	0.1240
6.5	0.1193	0.1237	0.1252	0.1275	0.1237	0.1274
7.0	0.1211	0.1224	0.1313	0.1348	0.1343	0.1298
7.5	0.1314	0.1281	0.1234	0.1362	0.1289	0.1403
8.0			0.1483		0.1336	0.1253

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1450+							
4.125								
4.375	0.14831	0.1552						
4.625		0.1558						
4.875		0.1516						
5.125	0.1447		0.1589					
5.375	0.1363	0.1409	0.1477					
5.625	0.1353, 0.1373	0.1390	0.1443	0.1529				
5.875	0.1356	0.1389	0.1438					
6.125		0.1372	0.1447	0.1509	0.1544			
6.375	0.1295	0.1304	0.1336	0.1388	0.1507			
6.625	0.1241	0.1319	0.1369	0.1461	0.1633			
6.875	0.1323	0.1410	0.1450	0.1527	0.1939	0.2154	0.2923, 0.3585	
7.125	0.1394	0.1448	0.1560	0.1761	0.2442	0.3263		
7.375	0.1485	0.1539	0.1667	0.2092	0.2884	0.3404	0.3909	

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST					WTR1421				
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)					RUN 60				
ALPH	9.96 deg	PIII	271.48 deg AVERAGED DATA	PO	14.69 psia SCALE FACTOR:	TO	85.24 degF	MACH	4.0
BODY PRESSURES (PSI)									
z/d	theta:	271.5	286.5	301.5	316.5	331.5	346.5		
0.5	0.5488								
1.0	0.4340								
1.5	0.3443		0.3374	0.3185	0.2858	0.2523	0.2063, 0.1939		
2.0	0.2569						0.1561, 0.1489		
2.5	0.2164		0.2128	0.1993	0.1793	0.1545	0.1282		
3.0	0.1737								
3.5	0.1598		0.1596	0.1512	0.1354	0.1245	0.1316		
4.0	0.1591		0.1591	0.1486	0.1374	0.1406	0.1423		
4.3	0.1610		0.1584	0.1453	0.1453	0.1438	0.1485		
4.5	0.1630		0.1609	0.1550	0.1532	0.1501	0.1476		
4.8	0.1650		0.1615	0.1526	0.1588	0.1568	0.1606		
5.0	0.1650		0.1565	0.1527	0.1589	0.1638	0.1607		
5.5	0.1592		0.1573	0.1636	0.1607	0.1608	0.1596		
6.0	0.1586		0.1623	0.1622	0.1652	0.1652	0.1620		
6.5	0.1596		0.1637	0.1667	0.1684	0.1645	0.1640		
7.0	0.1622		0.1649	0.1737	0.1764	0.1771	0.1681		
7.5	0.1708		0.1695	0.1660	0.1780	0.1742	0.1775		
8.0				0.1845		0.1657	0.1434		

WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625									
3.875	0.1958+								
4.125									
4.375	0.21401	0.2188							
4.625			0.2201						
4.875			0.2128						
5.125				0.2215					
5.375	0.1929			0.2114					
5.625	0.1842			0.2067					
5.875	0.1803, 0.1859			0.2050	0.2153				
6.125	0.1849			0.2042					
6.375	0.1828			0.1930	0.2133	0.2160			
6.625	0.1774			0.1945	0.1987	0.2099			
6.875	0.1859			0.1987	0.2027	0.2100	0.2254		
7.125	0.1914			0.2071	0.2036	0.2208	0.2791, 0.4585		
7.375	0.2024			0.2097	0.2190	0.2451	0.3502		
					0.2264	0.2867	0.4100	0.5017	

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PS#1(PR/10) PS#2(TC/1)

BODY PRESSURES (PSI)

WING PRESSURES (PSI)

-A-194

WTR1421
RUN 62

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH -0.07 deg PHI 293.81 deg PO 14.67 psia TO 86.29 degF MACH 4.0

AVERAGED DATA SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	293.8	308.8	323.8	338.8	353.8	368.8
0.5	0.3133						
1.0	0.2355						
1.5	0.1825						
2.0	0.1330						
2.5	0.1137						
3.0	0.0919						
3.5	0.0866						
4.0	0.0893						
4.3	0.0915						
4.5	0.0937						
4.8	0.0962						
5.0	0.0981						
5.5	0.0952						
6.0	0.0942						
6.5	0.0941						
7.0	0.0962						
7.5	0.1066						
8.0							

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1045+							
4.125								
4.375	0.09721	0.1079						
4.625								
4.875								
5.125								
5.375	0.1056							
5.625	0.0951							
5.875	0.0955, 0.0971							
6.125	0.0951							
6.375	0.0917							
6.625	0.0871							
6.875	0.0949							
7.125	0.0996							
7.375	0.1085							

WTR1421
RUN 63

WTR1421
RUN 63

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST.
PSI CONFIGURATION PSIN1(PR/10) PSIN2(TC/1)

ALPH	4.94 deg	PHI	293.94 deg	P0	14.67 psia	T0	86.55 degF	MACH	4.0
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BODY PRESSURES (PSI)

z/d	theta:	293.9	308.9	323.9	338.9	353.9	368.9
0.5	0.4136						
1.0	0.3165						
1.5	0.2469						
2.0	0.1807						
2.5	0.1513						
3.0	0.1214						
3.5	0.1115						
4.0	0.1125						
4.3	0.1143						
4.5	0.1172						
4.8	0.1194						
5.0	0.1205						
5.5	0.1168						
6.0	0.1161						
6.5	0.1165						
7.0	0.1169						
7.5	0.1244						
8.0							

WING PRESSURES (PSI)

z/d	$r/d:$	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1323+							
4.125								
4.375	0.13711	0.1449						
4.625			0.1447					
4.875			0.1416					
5.125		0.1332		0.1475				
5.375		0.1253	0.1327	0.1383				
5.625	0.1402	0.1270	0.1308	0.1352	0.1412			
5.875		0.1250	0.1303	0.1346				
6.125			0.1290	0.1363	0.1420	0.1427		
6.375		0.1217	0.1237	0.1263	0.1297	0.1367		
6.625		0.1174	0.1247	0.1283	0.1336	0.1397	0.1561	
6.875		0.1256	0.1325	0.1347	0.1385	0.1564	0.2289, 0.2630	
7.125		0.1314	0.1360	0.1464	0.1589	0.2049	0.3122	
7.375		0.1340	0.1426	0.1577	0.1875	0.2786	0.3760	0.4304

WHITE OAK LABORATORY										WTR1421 RUN 64
		TUNNEL I2 PRESSURE TEST				PSI#2(TC/1)				
		PSI CONFIGURATION				PSI#1(PR/10)				
ALPH	10.00 deg	PHI	293.85 deg	P0	14.67 psia	T0	86.75 degF	MACH	4.0	
AVERAGED DATA										
SCALE FACTOR: 1.0000										
BODY PRESSURES (PSI)										
z/d	theta:	293.9	308.9	323.9	338.9	353.9	368.9			
0.5		0.5284								
1.0		0.4163								
1.5		0.3289	0.3021	0.2681	0.2284	0.1933	0.1545, 0.2523			
2.0		0.2455					0.1154, 0.1929			
2.5		0.2076	0.1892	0.1660	0.1411	0.1165	0.0951			
3.0		0.1646								
3.5		0.1523	0.1406	0.1235	0.1034	0.0962	0.1025			
4.0		0.1518	0.1397	0.1209	0.1066	0.1110	0.1119			
4.3		0.1528	0.1384	0.1175	0.1136	0.1134	0.1159			
4.5		0.1547	0.1392	0.1243	0.1201	0.1193	0.1175			
4.8		0.1566	0.1398	0.1224	0.1264	0.1251	0.1275			
5.0		0.1572	0.1363	0.1213	0.1283	0.1307	0.1295			
5.5		0.1516	0.1345	0.1320	0.1297	0.1299	0.1313			
6.0		0.1504	0.1388	0.1323	0.1358	0.1371	0.1348			
6.5		0.1497	0.1399	0.1388	0.1416	0.1391	0.1359			
7.0		0.1492	0.1423	0.1473	0.1510	0.1517	0.1412			
7.5		0.1532	0.1464	0.1450	0.1556	0.1500	0.1474			
8.0				0.1604		0.1429	0.1246			
WING PRESSURES (PSI)										
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435		
3.625										
3.875	0.1481+									
4.125										
4.375	0.18721	0.1927								
4.625		0.1936								
4.875		0.1890								
5.125										
5.375	0.1484									
5.625	0.1410									
5.875	0.2035, 0.1451				0.1856					
6.125	0.1431									
6.375		0.1444			0.1888	0.1848				
6.625	0.1405				0.1763	0.1805				
6.875	0.1500				0.1799	0.1809	0.1859			
7.125	0.1544				0.1804	0.1899	0.2207, 0.3364			
7.375	0.1541				0.1981	0.2153	0.2940			
			0.1732	0.1950	0.2100	0.2612	0.3897	0.5206		

WHITE OAK LABORATORY									
TUNNEL T2 PRESSURE TEST									
PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/1)									
ALPH	14.95 deg	PHI	294.06 deg	P0	14.67 psia	TO	86.98 degF	MACH	4.0
AVERAGED DATA									
SCALE FACTOR: 1.0000									
BODY PRESSURES (PSI)									
z/d	theta:	294.1	309.1	324.1	339.1	354.1	369.1		
0.5		0.6535							
1.0		0.5299							
1.5		0.4259	0.3794	0.3196	0.2540	0.1959	0.1410, 0.3015		
2.0		0.3263					0.1061, 0.2322		
2.5		0.2782	0.2453	0.2028	0.1593	0.1193	0.0867		
3.0		0.2239							
3.5		0.2083	0.1841	0.1509	0.1157	0.0965	0.1062		
4.0		0.2071	0.1825	0.1473	0.1160	0.1210	0.1232		
4.3		0.2071	0.1806	0.1434	0.1211	0.1270	0.1278		
4.5		0.2110	0.1820	0.1497	0.1312	0.1342	0.1318		
4.8		0.2132	0.1824	0.1471	0.1399	0.1425	0.1439		
5.0		0.2131	0.1794	0.1438	0.1462	0.1494	0.1460		
5.5		0.2057	0.1744	0.1506	0.1517	0.1536	0.1476		
6.0		0.2051	0.1758	0.1561	0.1642	0.1660	0.1559		
6.5		0.2050	0.1771	0.1695	0.1745	0.1719	0.1600		
7.0		0.2022	0.1803	0.1819	0.1867	0.1855	0.1696		
7.5		0.2035	0.1828	0.1835	0.1935	0.1861	0.1787		
8.0				0.1930		0.1660	0.1350		
WING PRESSURES (PSI)									
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435	
3.625									
3.875	0.1405+								
4.125									
4.375	0.24991	0.2526							
4.625			0.2555						
4.875			0.2465						
5.125		0.1543		0.2495					
5.375	0.1480		0.2317	0.2461					
5.625	0.2919, 0.1591		0.2246	0.2417					
5.875		0.1584	0.2277	0.2437	0.2397				
6.125			0.2191	0.2495	0.2489	0.2367			
6.375	0.1662		0.2077	0.2380	0.2386	0.2365			
6.625	0.1636		0.2047	0.2395	0.2427	0.2377	0.2338		
6.875	0.1736		0.2099	0.2430	0.2395	0.2390	0.2348, 0.3334		
7.125	0.1796		0.2075	0.2440	0.2456	0.2406	0.2372		
7.375	0.1849		0.1999	0.2434	0.2458	0.2393	0.2346	0.2294	

WHITE OAK LABORATORY

WIR1421
RUN 66WIR1421
RUN 66TUNNEL 12 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH	-0.05 deg	PHI	316.59 deg	P0	14.66 psia	T0	87.60 degF	MACH	4.0
			AVERAGED DATA		SCALE FACTOR:	1.0000			

BODY PRESSURES (PSI)

z/d	theta:	316.6	346.6	361.6	376.6	391.6
0.5	0.3146					
1.0	0.2365					
1.5	0.1829	0.1828	0.1829	0.1819	0.1835	0.1787, 0.1751
2.0	0.1334					0.1350, 0.1335
2.5	0.1155	0.1138	0.1135	0.1143	0.1135	0.1136
3.0	0.0916					
3.5	0.0871	0.0885	0.0912	0.0916	0.0910	0.0906
4.0	0.0901	0.0914	0.0917	0.0923	0.0917	0.0906
4.3	0.0917	0.0919	0.0904	0.0940	0.0905	0.0921
4.5	0.0949	0.0937	0.0975	0.0963	0.0922	0.0923
4.8	0.0972	0.0957	0.0959	0.0980	0.0951	0.0988
5.0	0.0992	0.0942	0.0934	0.0979	0.0966	0.0990
5.5	0.0953	0.0935	0.0997	0.0948	0.0940	0.0964
6.0	0.0945	0.0971	0.0958	0.0973	0.0974	0.0973
6.5	0.0947	0.0964	0.0978	0.0989	0.0956	0.0980
7.0	0.0954	0.0961	0.1012	0.1036	0.1028	0.0985
7.5	0.1037	0.1009	0.0980	0.1065	0.1000	0.1031
8.0			0.1198		0.1025	0.0939

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1046+							
4.125								
4.375	0.09821	0.1079						
4.625			0.1063					
4.875			0.1066					
5.125	0.1061			0.1072				
5.375	0.0952		0.0980	0.0992				
5.625	0.0961, 0.0975		0.0967	0.0967				
5.875	0.0941		0.0959	0.0984	0.0971			
6.125			0.0947	0.1006				
6.375	0.0925		0.0909	0.0910	0.1021	0.0962		
6.625	0.0867		0.0920	0.0921	0.0914	0.0925	0.0928	
6.875	0.0936		0.0966	0.0937	0.0914	0.0932	0.0937, 0.0940	
7.125	0.0974		0.0942	0.0959	0.0963	0.0954	0.0957	
7.375	0.0985		0.0937	0.0939	0.0942	0.0939	0.0940	0.0971

WHITE OAK LABORATORY

WIR1421
RUN 67

ALPH 4.92 deg PHI 316.55 deg
AVERAGED DATA

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/IO) PSI#2(TC/II)

WIR1421
RUN 67

MACH 4.0

TO 87.96 degF
1.0000

z/d theta: 316.6

0.5 0.3900

1.0 0.2971

1.5 0.2304

2.0 0.1685

2.5 0.1429

3.0 0.1128

3.5 0.1038

4.0 0.1045

4.3 0.1064

4.5 0.1091

4.8 0.1114

5.0 0.1126

5.5 0.1076

6.0 0.1060

6.5 0.1059

7.0 0.1061

7.5 0.1135

8.0

PO 14.76 psia
SCALE FACTOR: 1.0000

TO 87.96 degF

331.6 346.6 361.6 376.6 391.6

0.2142 0.1978 0.1800 0.1671 0.1503, 0.2326
0.1316 0.1210 0.1113 0.1027 0.1137, 0.1769
0.0962

0.0982 0.0924 0.0890 0.0894 0.0917
0.0991 0.0934 0.0938 0.0943 0.0934
0.0994 0.0922 0.0972 0.0940 0.0959
0.1009 0.1007 0.1006 0.0967 0.0961
0.1026 0.0998 0.1036 0.1011 0.1043
0.1009 0.0981 0.1039 0.1038 0.1049
0.1008 0.1024 0.1022 0.1042 0.1049
0.1057 0.1044 0.1069 0.1077 0.1053
0.1062 0.1086 0.1100 0.1068 0.1079
0.1065 0.1129 0.1153 0.1151 0.1100
0.1120 0.1102 0.1138 0.1163 0.1163
0.1352 0.1248 0.1095

WING PRESSURES (PSI)

z/d r/d: 0.5935 0.7185 0.8435 0.9685 1.0935 1.2185 1.3435

3.625 3.875 4.125 4.375 4.625 4.875 5.125 5.375 5.625 5.875 6.125 6.375 6.625 6.875 7.125 7.375

0.1184+ 0.12381 0.1301

0.1315 0.1284

0.1195 0.1192 0.1182 0.1167 0.1135 0.1100 0.1047 0.1127 0.1165 0.1222

0.1338 0.1249 0.1215 0.1221 0.1246 0.1148 0.1170 0.1195 0.1218 0.1228

0.1259 0.1289 0.1169 0.1198 0.1170 0.1199 0.1187 0.1196

0.1264 0.1224 0.1209 0.1210 0.1251 0.1307

0.1246 0.1250, 0.1539 0.1305 0.1533 0.2101

WIR1421
RUN 68

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH 9.95 deg PIH 316.74 deg PO 14.84 psia TO 88.11 degF MACH 4.0

AVERAGED DATA SCALE FACTOR: 1.0000

BODY PRESSURES (PSI)

z/d	theta:	316.7	346.7	361.7	376.7	391.7
0.5						
1.0						
1.5						
2.0						
2.5						
3.0						
3.5						
4.0						
4.3						
4.5						
4.8						
5.0						
5.5						
6.0						
6.5						
7.0						
7.5						
8.0						

0.1193, 0.3075
0.0892, 0.2343
0.0742

0.1454
0.0865
0.0766
0.0855
0.0873
0.0901
0.0978
0.1003
0.1005
0.1054
0.1068
0.1075
0.1111
0.1099
0.0872

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875								
4.125								
4.375								
4.625								
4.875								
5.125								
5.375								
5.625								
5.875								
6.125								
6.375								
6.625								
6.875								
7.125								
7.375								

0.1638
0.1589
0.1624
0.1561
0.1534
0.1548
0.1575
0.1481
0.1492
0.1507
0.1494
0.1485

0.1506
0.1488
0.1489
0.1498
0.1519
0.1545

0.1473
0.1479, 0.2325
0.1513
0.1545
0.1713

WIR1421
RUN 69

ALPH 14.92 deg PHI 316.57 deg
AVERAGED DATA

PSI CONFIGURATION PSI#1(PR/10) PSI#2(1C/1)

TUNNEL 12 PRESSURE TEST

WIITE OAK LABORATORY

PO 14.84 psia
SCALE FACTOR: 1.0000

TO 88.32 degf

MACH 4.0

WTR1421
RUN 69

z/d theta: 316.6

0.5	0.5549
1.0	0.4414
1.5	0.3504
2.0	0.2669
2.5	0.2280
3.0	0.1789
3.5	0.1650
4.0	0.1635
4.3	0.1634
4.5	0.1680
4.8	0.1706
5.0	0.1707
5.5	0.1600
6.0	0.1554
6.5	0.1596
7.0	0.1541
7.5	0.1530
8.0	

331.6 346.6 361.6 376.6 391.6

0.2875 0.2244 0.1686 0.1259 0.0913, 0.3968
0.0669, 0.3062
0.0557

0.1819 0.1383 0.1017 0.0734

0.1319 0.0994 0.0704 0.0612 0.0673
0.1300 0.0956 0.0709 0.0766 0.0767
0.1281 0.0914 0.0760 0.0814 0.0816
0.1290 0.0966 0.0847 0.0866 0.0855
0.1295 0.0956 0.0929 0.0944 0.0944
0.1285 0.0926 0.0985 0.0972 0.0988
0.1218 0.0947 0.0984 0.0996 0.1003
0.1188 0.0942 0.1044 0.1064 0.1020
0.1186 0.1018 0.1097 0.1079 0.1035
0.1194 0.1072 0.1192 0.1140 0.1057
0.1143 0.1070 0.1194 0.1196 0.1155
0.1230 0.1153 0.1063

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0861+							
4.125								
4.375	0.20141	0.1832						
4.625			0.2078					
4.875			0.1903					
5.125	0.0964			0.1950				
5.375	0.0898		0.1407	0.1922				
5.625	0.2882, 0.0943		0.1238	0.1937				
5.875	0.0907		0.1152	0.1942	0.1824			
6.125			0.1118	0.1973	0.1940	0.1777		
6.375	0.0953		0.1076	0.1868	0.1839	0.1787		
6.625	0.0895		0.1054	0.1826	0.1912	0.1814		
6.875	0.0883		0.1079	0.1769	0.1877	0.1847	0.1736	
7.125	0.1037		0.1069	0.1644	0.1934	0.1862	0.1757, 0.3416	
7.375	0.1171		0.1074	0.1597	0.1953	0.1855	0.1803	
							0.1786	0.1689

WIR1421
RUN 70

WHITE OAK LABORATORY

TUNNEL 12 PRESSURE TEST

PSI CONFIGURATION PS1#1(PR/10) PS1#2(TC/1)

ALPH -0.06 deg PHI 339.10 deg TO 88.58 degF MACII 4.0
AVERAGED DATA PO 14.84 psia SCALE FACTOR: 1.0000

WIR1421
RUN 70

z/d	theta:	354.1	369.1	384.1	399.1	414.1
0.5	0.3181					
1.0	0.2386					
1.5	0.1837					
2.0	0.1358	0.1848	0.1849	0.1829	0.1836	0.1791, 0.1791
2.5	0.1183	0.1151	0.1142	0.1143	0.1134	0.1348, 0.1334
3.0	0.0916					0.1138
3.5	0.0883	0.0888	0.0909	0.0908	0.0914	0.0907
4.0	0.0908	0.0914	0.0915	0.0928	0.0913	0.0913
4.3	0.0919	0.0919	0.0913	0.0935	0.0912	0.0923
4.5	0.0958	0.0935	0.0975	0.0958	0.0927	0.0933
4.8	0.0980	0.0961	0.0982	0.0982	0.0966	0.0982
5.0	0.1001	0.0963	0.0956	0.1003	0.0963	0.1002
5.5	0.0955	0.0944	0.0983	0.0954	0.0950	0.0966
6.0	0.0953	0.0969	0.0961	0.0972	0.0975	0.0973
6.5	0.0968	0.0968	0.0978	0.0981	0.0962	0.0981
7.0	0.0971	0.0981	0.0993	0.1000	0.0997	0.0992
7.5	0.1014	0.0996	0.0988	0.1024	0.0992	0.1015
8.0			0.1171		0.1005	0.0916

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1030+							
4.125								
4.375	0.09871 0.1056		0.1072					
4.625			0.1046					
4.875								
5.125	0.1051			0.1061				
5.375	0.0944			0.1004				
5.625	0.0958, 0.0974			0.0964	0.0966			
5.875	0.0925			0.0981				
6.125				0.1003	0.1036	0.0951		
6.375	0.0934		0.0919	0.0910	0.0919	0.0942		
6.625	0.0850		0.0933	0.0933	0.0964	0.0936	0.0931	
6.875	0.0930		0.0957	0.0956	0.0920	0.0942	0.0935, 0.0949	
7.125	0.0967		0.0937	0.0953	0.0965	0.0948	0.0950	
7.375	0.0989		0.0942	0.0944	0.0957	0.0926	0.0927	0.0912

WHITE OAK LABORATORY										WTR1421 RUN 71
TUNNEL T2 PRESSURE TEST										
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)										
ALPH	4.93 deg	PHI	339.27 deg AVERAGED DATA	P0	14.84 psia SCALE FACTOR:	T0	88.77 degF	MACH	4.0	
BODY PRESSURES (PSI)										
z/d	theta:	339.3	354.3	369.3	384.3	399.3	414.3			
0.5		0.3541								
1.0		0.2672								
1.5		0.2055	0.1893	0.1736	0.1585	0.1483	0.1379,0.2469			
2.0		0.1513					0.1050,0.1854			
2.5		0.1298	0.1163	0.1059	0.0987	0.0931	0.0911			
3.0		0.0996								
3.5		0.0926	0.0863	0.0823	0.0819	0.0833	0.0845			
4.0		0.0936	0.0875	0.0843	0.0868	0.0867	0.0865			
4.3		0.0943	0.0876	0.0841	0.0884	0.0866	0.0877			
4.5		0.0966	0.0883	0.0908	0.0913	0.0881	0.0881			
4.8		0.0983	0.0906	0.0919	0.0938	0.0923	0.0934			
5.0		0.0997	0.0902	0.0902	0.0960	0.0925	0.0955			
5.5		0.0941	0.0891	0.0947	0.0918	0.0917	0.0932			
6.0		0.0926	0.0927	0.0930	0.0949	0.0956	0.0949			
6.5		0.0926	0.0931	0.0959	0.0972	0.0951	0.0967			
7.0		0.0943	0.0961	0.0993	0.1002	0.1010	0.0993			
7.5		0.1013	0.1012	0.1018	0.1060	0.1032	0.1046			
8.0				0.1278		0.1122	0.1045			
WING PRESSURES (PSI)										
z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435		
3.625										
3.875	0.1029+									
4.125										
4.375	0.10631	0.1113								
4.625			0.1143							
4.875			0.1098							
5.125				0.1152						
5.375	0.1051			0.1102						
5.625	0.1284,0.1012	0.0969		0.1059						
5.875	0.0968			0.1028	0.1089					
6.125			0.1030	0.1096	0.1148	0.1086				
6.375	0.0992		0.1020	0.1016	0.1030	0.1077	0.1082			
6.625	0.0915		0.1039	0.1049	0.1080	0.1067	0.1088,0.1386			
6.875	0.0999		0.1068	0.1084	0.1037	0.1068	0.1093			
7.125	0.1044		0.1062	0.1083	0.1092	0.1078	0.1068			
7.375	0.1180		0.1084	0.1092	0.1098	0.1056	0.1076			

WTR1421
RUN 72

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH 9.93 deg PHI 339.10 deg PO 14.84 psia TO 88.94 degF MACH 4.0

AVERAGED DATA SCALE FACTOR: 1.0000

WTR1421
RUN 72

theta: 339.1

z/d 0.5 0.3854

1.0 0.2934

1.5 0.2265

2.0 0.1684

2.5 0.1438

3.0 0.1080

3.5 0.0988

4.0 0.0980

4.3 0.0974

4.5 0.0990

4.8 0.0997

5.0 0.0996

5.5 0.0909

6.0 0.0866

6.5 0.0858

7.0 0.0833

7.5 0.0851

8.0

354.1 369.1 384.1 399.1 414.1

0.1904 0.1575 0.1308 0.1144 0.1036, 0.3375

0.1154 0.0937 0.0781 0.0701 0.0802, 0.2554

0.0809 0.0660 0.0627 0.0676 0.0690

0.0791 0.0643 0.0690 0.0687 0.0687

0.0779 0.0639 0.0708 0.0699 0.0699

0.0757 0.0698 0.0734 0.0721 0.0714

0.0770 0.0730 0.0775 0.0765 0.0757

0.0763 0.0724 0.0810 0.0762 0.0786

0.0719 0.0769 0.0766 0.0775 0.0764

0.0711 0.0757 0.0789 0.0790 0.0788

0.0707 0.0789 0.0800 0.0785 0.0798

0.0744 0.0807 0.0826 0.0823 0.0812

0.0809 0.0850 0.0874 0.0832 0.0824

0.1034 0.0827 0.0805

WING PRESSURES (PSI)

z/d r/d: 0.5935 0.7185 0.8435 0.9685 1.0935 1.2185 1.3435

3.625 0.1227

3.875 0.0856+

4.125 0.1170

4.625 0.1264

4.875 0.1229

5.125 0.1199

5.375 0.1078

5.625 0.1035

5.875 0.0984

6.125 0.0932

6.375 0.0883

6.625 0.0876

6.875 0.0868

7.125 0.0850

7.375 0.0845

0.1264 0.1229 0.1199 0.1078 0.1035 0.0984 0.0932 0.0883 0.0876 0.0868 0.0850 0.0845

0.1197 0.1295 0.1185 0.1246 0.1152 0.1235 0.1233

0.1192 0.1198 0.1193 0.1209 0.1206 0.1185

0.1174 0.1193, 0.2025 0.1195 0.1172 0.1137

WHITE OAK LABORATORY

WTR1421
RUN 73

ALPH 14.92 deg PHI 339.35 deg
AVERAGED DATA

TUNNEL T2 PRESSURE TEST
PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

PO 14.83 psia
SCALE FACTOR: 1.0000

TO 89.15 degF

MACH 4.0

WTR1421
RUN 73

BODY PRESSURES (PSI)

z/d	theta:	339.3	354.3	369.3	384.3	399.3	414.3
0.5	0.4164						
1.0	0.3217						
1.5	0.2506						
2.0	0.1894						
2.5	0.1616						
3.0	0.1221						
3.5	0.1117						
4.0	0.1103						
4.3	0.1089						
4.5	0.1124						
4.8	0.1135						
5.0	0.1118						
5.5	0.1037						
6.0	0.0962						
6.5	0.0989						
7.0	0.0985						
7.5	0.1021						
8.0							

z/d	theta:	339.3	354.3	369.3	384.3	399.3	414.3
0.5	0.4164						
1.0	0.3217						
1.5	0.2506						
2.0	0.1894						
2.5	0.1616						
3.0	0.1221						
3.5	0.1117						
4.0	0.1103						
4.3	0.1089						
4.5	0.1124						
4.8	0.1135						
5.0	0.1118						
5.5	0.1037						
6.0	0.0962						
6.5	0.0989						
7.0	0.0985						
7.5	0.1021						
8.0							

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.0737+							
3.875	0.0737+							
4.125								
4.375	0.07011	0.0740						
4.625								
4.875								
5.125	0.0760							
5.375	0.0682							
5.625	0.2575, 0.0726							
5.875	0.0671							
6.125								
6.375	0.0744							
6.625	0.0656							
6.875	0.0763							
7.125	0.0841							
7.375	0.0904							

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625	0.0737+							
3.875	0.0737+							
4.125								
4.375	0.07011	0.0740						
4.625								
4.875								
5.125	0.0760							
5.375	0.0682							
5.625	0.2575, 0.0726							
5.875	0.0671							
6.125								
6.375	0.0744							
6.625	0.0656							
6.875	0.0763							
7.125	0.0841							
7.375	0.0904							

WHITE OAK LABORATORY									
TUNNEL 12 PRESSURE TEST					PSI CONFIGURATION				
PSI#1(PR/10) PSI#2(TC/1)					TO 1.0000				
ALPH	-0.08 deg	PIII	358.40 deg	P0	14.82 psia	TO	89.48 degF	MACH	4.0
AVERAGED DATA									
BODY PRESSURES (PSI)									
z/d	theta:	358.4	373.4	388.4	403.4	418.4	433.4		
0.5		0.3173							
1.0		0.2374							
1.5		0.1816	0.1839	0.1840	0.1824	0.1816	0.1772, 0.1810		
2.0		0.1361					0.1330, 0.1320		
2.5		0.1194	0.1147	0.1131	0.1129	0.1118	0.1129		
3.0		0.0900							
3.5		0.0890	0.0883	0.0900	0.0895	0.0902	0.0895		
4.0		0.0913	0.0906	0.0905	0.0921	0.0909	0.0916		
4.3		0.0915	0.0909	0.0908	0.0913	0.0916	0.0914		
4.5		0.0949	0.0918	0.0958	0.0940	0.0919	0.0928		
4.8		0.0971	0.0947	0.0987	0.0973	0.0964	0.0958		
5.0		0.0991	0.0963	0.0957	0.1010	0.0938	0.0998		
5.5		0.0950	0.0944	0.0970	0.0948	0.0944	0.0976		
6.0		0.0956	0.0959	0.0958	0.0969	0.0963	0.0968		
6.5		0.0975	0.0957	0.0970	0.0965	0.0959	0.0971		
7.0		0.0979	0.0984	0.0971	0.0969	0.0963	0.0989		
7.5		0.1002	0.0985	0.0992	0.1001	0.0987	0.1003		
8.0				0.1145		0.0991	0.0895		

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.1020+							
4.125								
4.375	0.09781	0.1043						
4.625			0.1061					
4.875			0.1030					
5.125	0.1038			0.1044				
5.375	0.0928		0.0971	0.1000				
5.625	0.0950, 0.0969		0.0963	0.0951	0.0950			
5.875	0.0904		0.0930	0.0971				
6.125			0.0924	0.0995	0.1032	0.0924		
6.375	0.0933		0.0918	0.0905	0.0911	0.0936		
6.625	0.0837		0.0933	0.0933	0.0965	0.0929	0.0916	
6.875	0.0924		0.0952	0.0956	0.0915	0.0940	0.0930, 0.0955	
7.125	0.0962		0.0937	0.0949	0.0962	0.0939	0.0938	
7.375	0.0986		0.0948	0.0946	0.0959	0.0917	0.0915	0.0893

WTR1421
RUN 75

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(TC/1)

ALPH 4.93 deg PHI 358.36 deg PO 14.82 psia TO 89.58 degF MACH 4.0

AVERAGED DATA SCALE FACTOR: 1.0000

theta: 358.4

z/d	theta	373.4	388.4	403.4	418.4	433.4
0.5	0.3187					
1.0	0.2380					
1.5	0.1822					
2.0	0.1352	0.1683	0.1551	0.1450	0.1388	0.1326, 0.2481
2.5	0.1170	0.1039	0.0960	0.0914	0.0883	0.1019, 0.1837
3.0	0.0873					0.0900
3.5	0.0830					
4.0	0.0837	0.0779	0.0782	0.0792	0.0803	0.0795
4.3	0.0834	0.0792	0.0786	0.0815	0.0805	0.0809
4.5	0.0862	0.0790	0.0792	0.0816	0.0816	0.0819
4.8	0.0879	0.0804	0.0854	0.0850	0.0821	0.0834
5.0	0.0890	0.0834	0.0880	0.0880	0.0872	0.0873
5.5	0.0833	0.0847	0.0854	0.0915	0.0848	0.0905
6.0	0.0829	0.0821	0.0864	0.0850	0.0845	0.0879
6.5	0.0841	0.0840	0.0852	0.0869	0.0866	0.0868
7.0	0.0864	0.0846	0.0872	0.0877	0.0866	0.0875
7.5	0.0947	0.0895	0.0898	0.0903	0.0904	0.0918
8.0		0.0947	0.0954	0.0968	0.0959	0.0965
			0.1197		0.1037	0.1047

WING PRESSURES (PSI)

z/d	r/d	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0902+							
4.125								
4.375	0.09361	0.0979						
4.625								
4.875								
5.125	0.0968							
5.375	0.0878							
5.625	0.1165, 0.0917							
5.875	0.0867							
6.125								
6.375	0.0913							
6.625	0.0822							
6.875	0.0918							
7.125	0.0974							
7.375	0.1107							
		0.1018						
		0.0971						
		0.0930						
		0.0926						
		0.0897						
		0.0899						
		0.0900						
		0.0926						
		0.0955						
		0.0953						
		0.0985						
			0.1013					
			0.0887					
			0.0925					
			0.0957					
			0.0914					
			0.0975					
			0.0983					
				0.0931				
				0.1016				
				0.0930				
				0.0924				
				0.0941				
				0.0947				
				0.0933				
				0.0983				
					0.0915			
					0.0934, 0.1164			
					0.0945			
					0.0933			
						0.0914		

WIR1421
RUN 76

WHITE OAK LABORATORY

TUNNEL T2 PRESSURE TEST

PSI CONFIGURATION PSI#1(PR/10) PSI#2(1C/1)

ALPH 9.93 deg PHI 358.49 deg PO 14.82 psia TO 89.79 degf MACH 4.0

AVERAGED DATA SCALE FACTOR: 1.0000

WIR1421
RUN 76

BODY PRESSURES (PSI)

z/d	theta:	358.5	373.5	388.5	403.5	418.5	433.5
0.5	0.3127						
1.0	0.2335						
1.5	0.1777						
2.0	0.1318		0.1489	0.1257	0.1105	0.1046	0.1024, 0.3370
2.5	0.1140		0.0894	0.0743	0.0696	0.0707	0.0818, 0.2529
3.0	0.0812						0.0750
3.5	0.0748		0.0607	0.0615	0.0635	0.0654	0.0638
4.0	0.0732		0.0599	0.0608	0.0650	0.0638	0.0628
4.3	0.0712		0.0583	0.0614	0.0636	0.0644	0.0630
4.5	0.0714		0.0568	0.0656	0.0652	0.0640	0.0635
4.8	0.0720		0.0595	0.0688	0.0680	0.0672	0.0639
5.0	0.0718		0.0620	0.0660	0.0721	0.0634	0.0677
5.5	0.0650		0.0609	0.0666	0.0655	0.0648	0.0686
6.0	0.0627		0.0640	0.0664	0.0674	0.0669	0.0669
6.5	0.0644		0.0675	0.0704	0.0699	0.0669	0.0676
7.0	0.0696		0.0749	0.0731	0.0724	0.0710	0.0731
7.5	0.0774		0.0789	0.0793	0.0806	0.0800	0.0782
8.0				0.0943		0.0845	0.0867

WING PRESSURES (PSI)

z/d	r/d:	0.5935	0.7185	0.8435	0.9685	1.0935	1.2185	1.3435
3.625								
3.875	0.0811+							
4.125								
4.375	0.08821	0.0915						
4.625		0.0967						
4.875		0.0901						
5.125	0.0844			0.1014				
5.375	0.0733			0.0975				
5.625	0.1572, 0.0763			0.0929				
5.875	0.0696			0.0950	0.0948			
6.125		0.0790		0.0986	0.1053	0.0940		
6.375	0.0723	0.0763		0.0898	0.0935	0.0969		
6.625	0.0611	0.0782		0.0927	0.1010	0.0967	0.0956	
6.875	0.0691	0.0769		0.0941	0.0955	0.0986	0.0978, 0.1540	
7.125	0.0739	0.0766		0.0908	0.1006	0.0986	0.0987	
7.375	0.0762	0.0782		0.0918	0.1015	0.0975	0.0973	0.0945

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